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# The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

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No. 3190.—Vol. LXVI.

LONDON, SATURDAY, OCTOBER 10, 1896.

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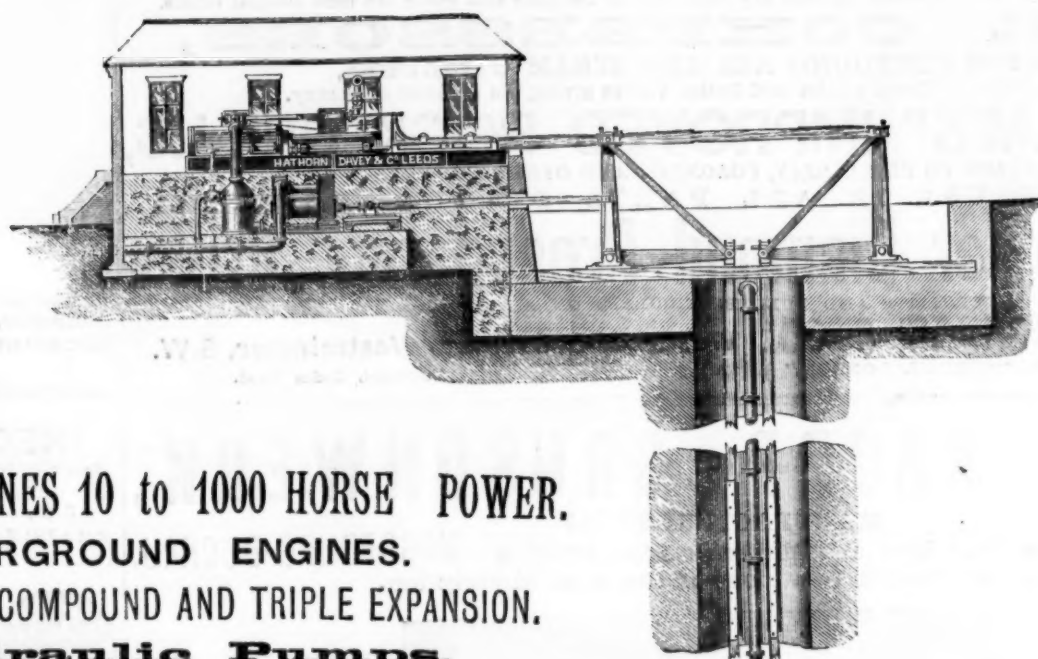


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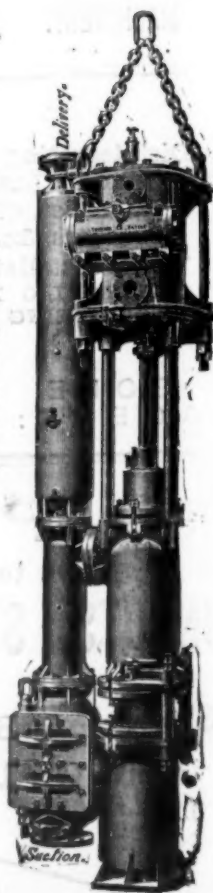
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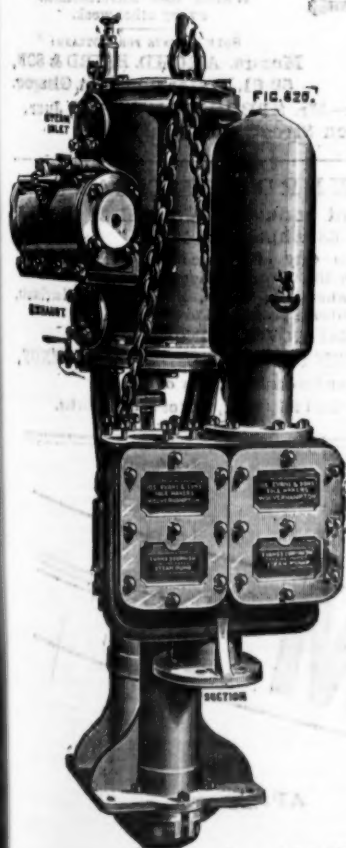
FIG. 875, "FLUOMETER"  
PATENT STEAM VACUUM  
PUMP.

The "CORNISH" STEAM PUMP.  
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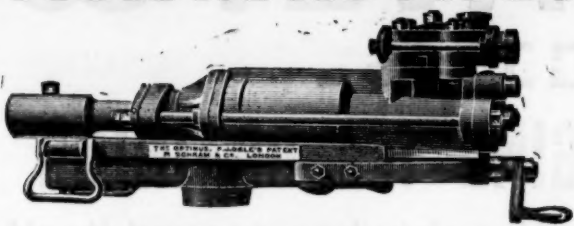
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Consumes 40 per cent. less Compressed Air than any other Drill at the same time giving the most effectual results.

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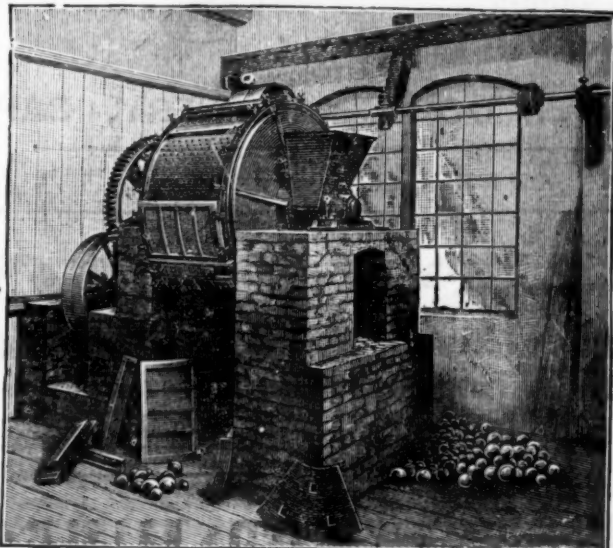
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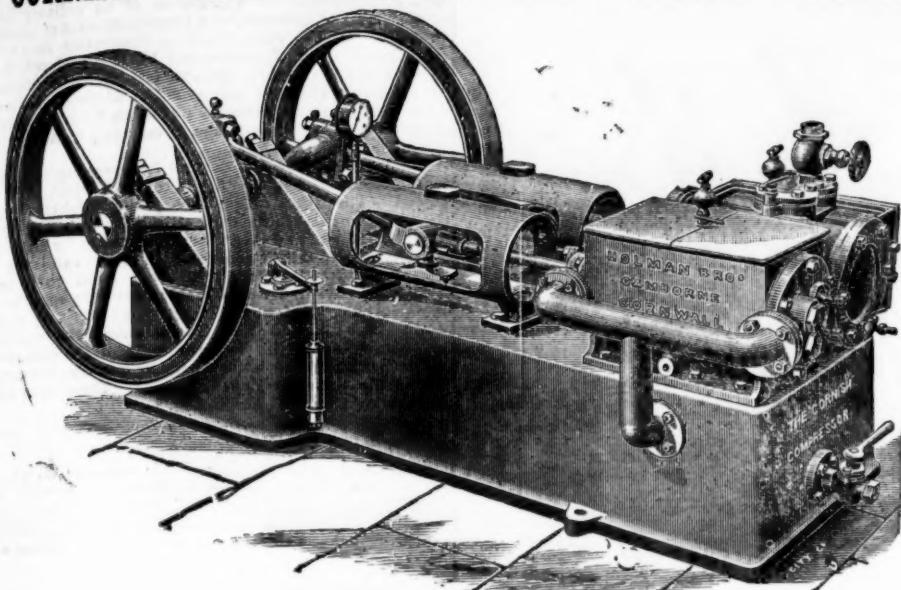
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At Botallack Mine, St. Just, Cornwall, **TWELVE MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** drove, sunk, and rose **288 FATHOMS** in **12 MONTHS**, equal to five times the Speed of Hand Labour.

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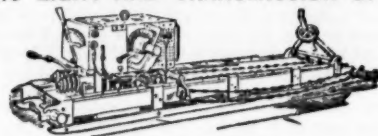
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ALL PARTS INTERCHANGEABLE.

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Sec. B. ELECTRICAL PLANT AND STORES.

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The Principal County Paper in the Midlands.

Advertisers will find it the **BEST MEDIUM** for reaching superior class of readers over large area centred by Staffordshire fifth county in population and sixth in wealth.  
Published at Stafford every **SATURDAY** (Price Twopence), and to be obtained at Euston and Principal Bookstalls between London, Liverpool, and Manchester.

**AWARDS:** CRYSTAL PALACE, 1890; TASMANIA, 1891; KIMBERLEY, 1892.

# CONCENTRATION.

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In the **CLARKSON-STANFIELD** process of Concentrating Refractory and Complex Ores no water is required; dust is reduced to a minimum; the loss of Mineral through water-borne Slimes is obviated.

**OUTPUT 1 TO 2 TONS PER HOUR, ACCORDING TO SIZE OF MACHINE.**

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The Machine is superior to Sieves for Sizing Homogeneous Substances, such as Emery, Sand, and Powders, and may be used to great advantage in the preparation of Ochre.

N.B.—The owners of the Carnadochan Mine, near Bala, North Wales, will, by arrangement, show their **CLARKSON-STANFIELD** plant working on a Refractory Low Grade Gold Ore.

## NEW PATENTS.

**LIST OF APPLICATIONS** for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

- 2232 Michel Nicholas D'Andria, 5, Frogmore Terrace, Chester Road, Stretford, Lancashire.—Improvements in and connected with the utilisation of calcium chloride solutions, the recovery of hydrochloric acid, and the manufacture of magnesium sulphate, or magnesia and chloride.—September 21.
- 2233 William Noel and Richard Joseph Lightfoot, 14, Compton Terrace, Highbury, London.—Improved method for the extraction of and recovery of metallic copper.—September 21.
- 2234 Benton Knott Jamison, 18, Falmham Place, Paddington, London.—Improvements in the treatment of crude or low grade steel.—September 21.
- 2235 George Pearce Lewis and Richard Augustus Cripps, 6, Bream's Buildings, Chancery Lane, London.—Improved means for manufacturing and recovering cyanides and apparatus therefor.—September 21.
- 2236 William Henry Coward, 53, Chancery Lane, London.—Improvements in the utilisation of small coal for heating steam boilers and other furnaces.—September 22.
- 2237 Albert Franklin Kingsley, 47, Lincoln's Inn Fields, London.—Improvements in connection with, and other boiler furnaces.—September 22.
- 2238 Walter David Forsyth and Enos Thomas Bat, 77, Chancery Lane, London.—Appliances for removing scale or other foreign substance from the interior of boiler tubes.—September 22.
- 2239 Alexander James Colcough Kettel, 7, Southampton Buildings, Chancery Lane, London.—A new or improved process for the extraction of silver from refractory sulphide ores and apparatus connected therewith.—September 22.
- 2240 Charles Simmons and Robert Arthur Bruce, 15, St. James's Row, Sheffield.—Improvements in high speed compound speed engines.—September 22.
- 2241 Albert Edward Eaton, 15, St. James's Row, Sheffield.—Improvements in water tube steam boilers.—September 22.
- 2242 David Joy, 55, Gracechurch Street, London.—Improvements in compound locomotives, and adding condensing arrangements thereto.—September 22.
- 2243 Francis and Bennett.—Steam boiler and other furnaces.—September 22.
- 2244 H. Watson.—Isolating valves for steam boilers.—September 22.
- 2245 Paul.—Flural screw engines.

**NITRATE.**—The Permanent Nitrate Committee's public statistical circular for October gives the following particulars:—Nitrate of Soda, 1. Total exports to Europe, September, quintals 1,425,000; 2. Total exports to Europe, October 1, quintals 2,684,000. 3. Imports, Europe, September, tons 75,730. 4. Deliveries, Europe, September, tons 43,500. 5. Visible supply, Europe, October 1: Stocks and sales, tons 487,565.

**LIVERMAY'S CONSOLIDATED MINES (LIMITED).**—On and after the 1st October the registered office of this company will be at 130, Cannon-street, E.C.

## JOINT-STOCK COMPANIES.

### NEW REGISTRATIONS.

THE following are among the joint-stock companies registered at Somerset House since our last notice:—

**Golden Horn Consolidated Mining Company (Limited).**—Registered September 24 by Edwin Andrew and White, 7, Clement's Lane, E.C. Capital £50,000, in £1 shares. Objects: To acquire any mines, mining rights, &c., in the United States of America, and to develop, deal with, and turn to account the same, and further to acquire any mines, mining, water and other rights, grants, leases, claims, concessions, options of purchase, metalliferous land, &c., in any part of the world; to acquire any lands, estates, and other property, and to turn to account the same.

**Western Challenge Gold Mining Company (Limited).**—Registered September 25 by Chas. and Sons, 1, Great Winchester Street, E.C. Capital £20,000, in £1 shares, to acquire any mines, mining, water and other rights, grants, leases, claims, concessions, options of purchase, metalliferous land, &c., in any part of the world; to work, develop, deal with and turn to account the same.

**Horsfall Engineering Syndicate (Limited).**—Registered September 25 by A. H. Atkins (Limited), Boulevard Street, E.C. Capital £10,000, in £1 shares, to carry on in all or any of their respective branches, the businesses of builders of furnaces for the destruction of town or other refuse, or for general or other purposes; as mechanical engineers, machine makers, boiler makers, iron and steel founder, millwrights, &c.; also to deal in machinery, rolling stock, implements, tools, utensils, hardware.

**Peabody and Berkshire Gold Mines (Limited).**—Registered 8-September 25 by A. J. G. Giesman, Tower Chambers, Finsbury Pavement, E.C. Capital £100,000 in £1 shares, for the acquisition by purchase or otherwise of certain mining properties known as the Peabody and Berkshire properties, in the colony of Victoria, Australia, and to develop, work, deal with, and generally turn to account the same; and further to acquire any mines, mining, water, and other rights, grants, leases, claims, concessions, options of purchase, metalliferous land, &c., in any part of the world.

**G. Iden H. H. Mining Company (Limited).**—Registered September 30 by Brown, Miller, and Co., 3, Church Court, Old Jewry, E.C. Capital £100,000 in £1 shares, to acquire any mines, mining, water and other rights, grants, leases, claims, concessions, options of purchase, metalliferous land, &c., in any part of the world; to work, develop, deal with and turn to account the same, and to carry on the business of a mining, milling, smelting, and metallurgical company in all or any of its branches, &c.

**Mount Magnet Proprietary (Limited).**—Registered September 29 by Inglis, Holmes, and Sons, 20, Threadneedle Street, E.C. Capital £100,000 in £1 shares, to acquire any mines, mining, water and other rights, grants, leases, claims, concessions, options of purchase, metalliferous land, &c., in any part of the world.

**Kalgoolie Timber Supply Syndicate, Limited.**—Registered Oct 1. Capital £20,000 in £1 shares. Objects: To enter into an agreement (made September 30) with H. G. Parsons, of Kalgoolie, W.A., and to carry on the business of general storekeepers, merchants, café proprietors, &c.

**Gold Fields of Hauraki Prospecting Syndicate (Limited).**—Registered September 22. Capital £5000, in £1 shares. Objects: To acquire any mines, mining or other rights, &c., in New Zealand or elsewhere, and to deal with and turn to account the same.

**Combar Investment Company (Limited).**—Registered September 27. Capital £100,000, in £1 shares. Objects: To undertake, participate in, or assist in commercial, industrial, and financial undertakings of all kinds in Europe, Australia, or elsewhere.

## CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given.

The date given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

**Coal, October 12 (Lancaster).**—For coal (medium household), slack, and coke required during year ending October 1, 1897, for the Lancaster School Board. Tenders under seal, and marked "Tenders for coal," must be received by Mr. Herbert D. Wilson, clerk, not later than 12 noon on 11th instant. The price per ton include delivery at either the board offices or the schools, as may be required.

**Coal, October 13 (Lancaster).**—For the supply of coal to the several schools, for the Lancaster School Board. Forms of tender can be obtained on application to Mr. John Jennings, clerk. Sealed tenders marked "Tender for coal," to be sent to the clerk by 12th inst.

**Cannel, October 13 (Newcastle).**—For the supply of 2000 tons of good round cannel for the gas committee. Forms of tender and mode of delivery may be obtained from Mr. W. Foster, manager, Gasworks. Tenders to be marked "Cannel," and addressed to Mr. R. M. Fennell, Town Clerk, October 13.

**Pipe Connecting, October 13 (Baltimore).**—For connecting the water pipes on the road with the waterworks of the Baltimore District Asylum, according to specification to be seen at the office of the asylum, for the governors. Tenders by October 12. Mr. James Young, clerk.

**Railway Stores, October 13 (India Office, S.W.).**—The Secretary of State for India in Council is prepared to receive tenders to supply (1) steel fishbolts, (2) wrought iron spikes for rails, (3) steel laminated springs, (4) steel volute springs. The conditions of contract may be obtained on application to the Director-General of Stores, India Office, Whitehall, S.W., and tenders are to be delivered at that office by 2 p.m. on 13th inst.

**Railway Stores, October 17 (Lisbon).**—For the supply to the Royal Portuguese Railway Company of (1) sheet and other iron, and (2) ticket punches and tickets numbering and issuing stampers. Tenders to the Chief of the Stores Department at Santa Apollonia Station, Lisbon; and particulars also obtainable at Paris, Rue de Chateaudun, 28.

**Goods Wagons, October 21 (Cristiania).**—For the supply of 10 goods wagons to the Norwegian State Railways. Tenders, endorsed "Grusvognene," to the direction of the State Railways, Lercheboret, 1 Christiania.

**Railway, November 3 (Sofia, Bulgaria).**—The Bulgarian and Yeni Zagora railway contract, of which various particulars have appeared, is now advertised for November 3 as the date of sending in tenders. Application should be made for particulars to the Bulgarian Ministry of Public Works at Sofia.

**Pumps, November 9 (Huyt-sur-Mer, Belgium).**—For the supply and erection of machinery and pumps for the waterworks and sewers. Particulars for 2 frs. (1s. 7d.) from L'Administration Communale, Huyt-sur-Mer, Belgium.

**Water works, December 31 (Saint Malo).**—Competition for a town water supply. Application to the Hotel de Ville, Saint Malo, 11, rue de la Ville.



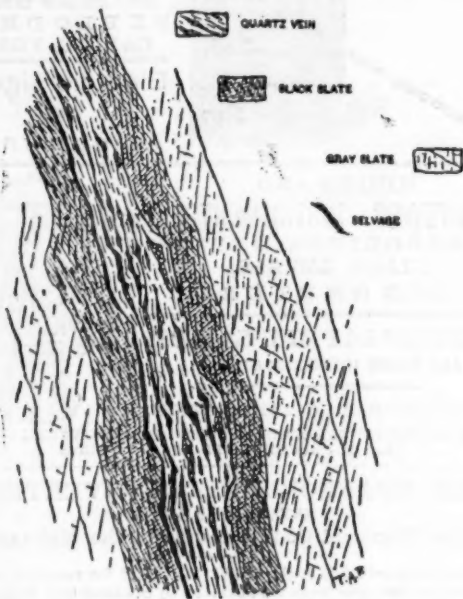
## VEIN WALLS.\*

By T. A. RICKARD, Denver, Colorado.

(Continued from page 1246.)

OF the change observable in the character and value of the mineral ingredients of a vein in its passage from one kind of rock into another it is hardly possible to speak in parenthesis. One of the best known examples is that of the old D. Leath Mine in Cornwall, where the vein, in leaving the clay slate (killas) and penetrating the granite, changed from a copper-bearing into a tin-bearing lode. I might also mention the silver-lead veins of Pontgibaud,† in France, which are in a gneiss country diversified by dykes of granulite. The ore veins have been formed along fractures within the dykes, and on their line of contact with the gneiss. When the dyke diminishes in size the ore decreases in width; when the vein penetrates into the gneiss the ore disappears. The best ore is associated with the kaolinisation of the feldspar of the granulite, and when the latter becomes hard and unaltered in depth the ore pinches out.

Fig. 5.



BONANZA VEIN, OREGON.

On Newman Hill, Rico, Colorado, the veins of rich gold and silver-bearing ores are noticeably affected by the character of their rock walls. The particular changes due to penetrating from lime into sandstone have already been mentioned in connection with the veins of the Enterprise Mine, but there is also the more general observation that when the sedimentary beds are black the veins in them are rich when they lose that black colour the ore diminishes.

Other instances occur to me, but the above are typical. This inter-dependence between country and ore has been used as an argument in support of the now crippled lateral secretion theory. It has been suggested that this relation, often noticed in vein mining, points to the derivation of the ore from the enclosing rock, and that some formations have an enriching effect, because they have been the source of the valuable metals now found in the veins penetrating them. But as Cotta long ago suggested, the influence of the physical texture and chemical composition of the country, as facilitating the deposition of the ore, may explain this phenomenon. The former would affect the rate of cooling and the formation of the adhesive crusts. The latter would act by direct chemical precipitation.

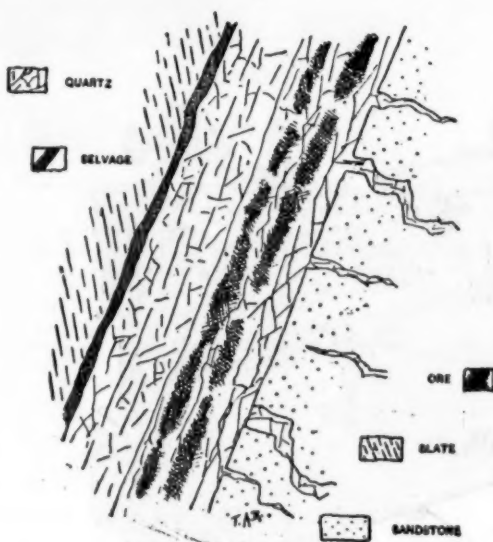
As I suggested in the discussion of the paper just referred to, the local enrichment or impoverishment of veins may be explained by the presence or absence in the enclosing formation of precipitating agents. What the agent has been we can only in rare instances guess. At Rico it was undoubtedly the carbonaceous matter enclosed in the lower carboniferous shales, limestones, and sandstones. At Pontgibaud it was probably the feldspar which made room for the silver-bearing galena, and in Cornwall also the beautiful pseudomorphs of tin-stone after feldspar suggest similar chemical interchanges.

In the case of veins which lie along the bedding planes of sedimentary rocks, the dissimilarity between the enclosing walls may not go farther than a slight difference in the grain of two beds of

sandstone, the colour of two beds of slate, &c., or it may reach the more marked diversity presented by rocks as entirely unlike as a quartzitic sandstone and soft slate.

Fig. 6 represents a gold vein, following the bedding of and enclosed by a band of black slate, which is in turn flanked on either side by light gray slates. The ore consists of ribbons of quartz, mingled with strips of included country, and separated from the outer slates by a selvage, faint on the hanging wall but strong on the foot wall. The drawing was made July 3, 1895, in the upper level of the Bonanza Mine, Baker County, Oregon.

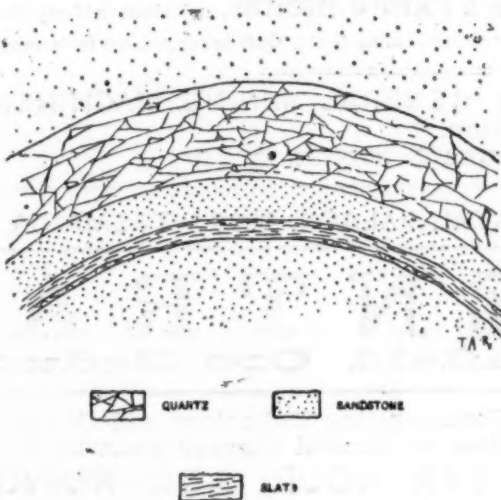
Fig. 6.



SHENANDOAH MINE, VICTORIA.

The comparatively straight walls of ordinary vein mining occasionally give place in veins of the bedded class to surfaces, having a marked curvature. Such walls characterise the saddle

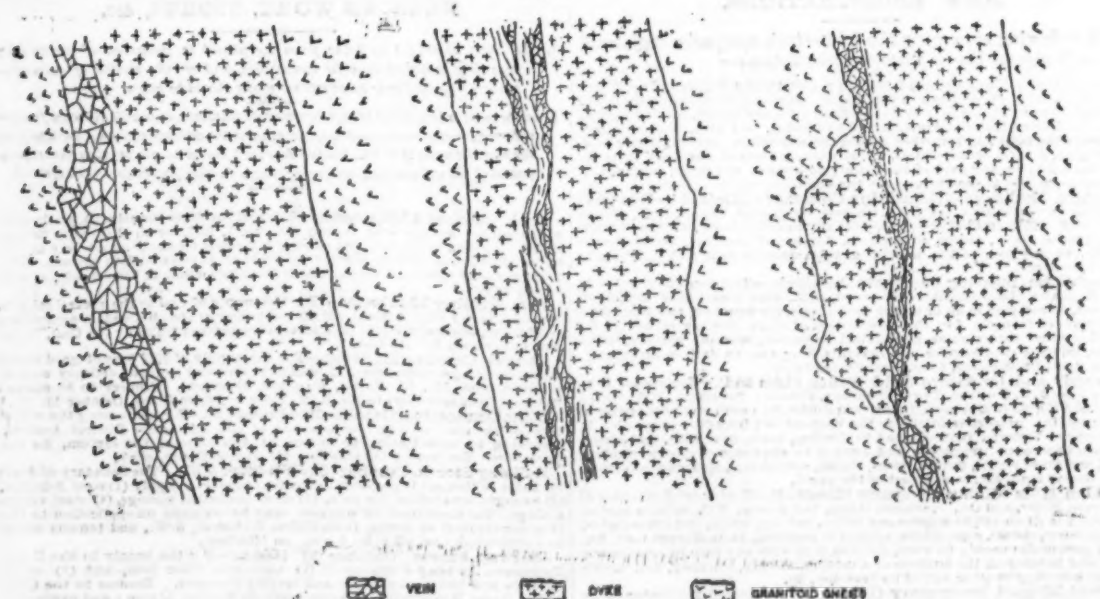
Fig. 7.



JOHNSON'S MINE, VICTORIA.

reef, a type of lode structure common in only two known mining districts, namely, Bendigo in Australia and Waverly in Nova Scotia, unless it be true, as is now stated on good authority, that the Broken Hill lode in New South Wales is also a saddle reef.

Fig. 8.



TYPES OF VEIN STRUCTURE IN GILPIN COUNTY COLORADO

\* A Paper read before the American Institute of Mining Engineers.

† See "The Lodes of Pontgibaud," by the writer, in the *Engineering and Mining Journal* of August 11 and 18, 1894.

‡ As, for instance, in the paper "On Some Evidences of the Formation of Ore Deposits by Lateral Secretion in the John Jay Mine, at Providence, Boulder County, Colorado," by E. H. Van Dine, in the *Proceedings of the Colorado Scientific Society*, Vol. IV., p. 340, and in the discussion of the said paper, id., p. 340.

In these regions, gold-bearing quartz is found along the bedding-planes of folded sedimentary rocks. While anticlinal folds (or saddles) alternate with synclines (inverted saddles or troughs), experience has shown that the ore deposition is mainly confined to the former. Such a formation will offer many striking features, because of the occasionally very regular curvature of the walls. I remember, for instance, standing in the slopes just above the 980

feet level in the Johnson's Mine at Bendigo, and seeing the footwall curve underneath like the top of a boiler, while the hanging arch overhead like a Roman bridge. This was the apex of a saddle, as illustrated in Fig. 7, reproduced from a sketch made at the time.

The lode is seen to consist of white quartz about 2½ feet thick, separated from the overlying sandstone by a very regular parting of black clay. Underneath is about a foot of sandstone, then a dark bed of sandstone is marked by streaks of quartz, thinning out both east and west.

The downward continuation of such a formation (the "legs of the saddle") presents the appearance of an ordinary bedded vein, usually marked, however, by a noteworthy want of persistence of ore in depth. Of the many drawings illustrating such veins already contributed to the *Transactions*,† I have reproduced, in Fig. 6, the one of the north end of the 1890 feet level in the Shenandoah Mine at Bendigo. The lode carries 2 feet of closely laminated quartz from which spurs or stringers go off into the underlying sandstone. The hanging shows a gouge or selvage, separating the quartz from the overlying slate.

Many veins follow the contact between eruptive dykes and the metamorphic or sedimentary formations which they have penetrated. The dykes of quartz andesite porphyry traversing the granitoid gneiss of the earliest mining districts of Colorado (in Boulder, Gilpin, and Clear Creek counties) offer many examples of this type of vein structure. In such cases the mineralization may often be found to have spent itself on the more soluble porphyritic igneous rock rather than upon the less soluble metamorphic. The walls of such veins will vary as the ore deposition has followed either fractures along the immediate contact, or those which ramify into the body of the dyke, or those again which cut across the latter where its irregular outline has been an obstacle to the main line of fissuring. These ideas are illustrated in the diagrams A, B, and C, Fig. 8.

\* October 5, 1890. See also *Transactions*, XX., 506.

† By the writer in Vols. XX. and XXI. "Selvage," "gouge," "dig," "pug," "sucan" are all, more or less, synonymous. "A layer of soft stuff" would cover them all. It is, perhaps, worthy of notice, however, that our "selvage," used in this sense, is not the exact synonym, as it has often been supposed to be, of the German *Schalland*. A *Schalland* is a definite wall, as distinguished from a gradual transition from vein matter into country rock. A layer of soft material on the wall is a *Sage*.

(To be continued.)

## MINING IN VICTORIA.

## THE ANNUAL REPORT FOR 1895.

(FROM OUR OWN CORRESPONDENT.)

THE 1895 annual report of Mr. J. Travis, Acting Secretary for Mines, which has just been issued, contains many interesting facts. Some of the figures are not altogether new, having been published in *The Mining Journal* from time to time as they were issued by the department; but now they are collected altogether opportunity is given of making a very reliable comparison. Only a brief review of the facts presented and a little calm reflection on them is needed to establish the reputation of Victoria as the premier gold fields colony not only of the past but also of the present. During the past 45 years over £240,000,000 worth of gold has been raised within the colony. The total yield of gold for 1895 was 740,086 ounces, of the value of £2,960,344, as against 716,954 ounces, valued at £2,867,816 for 1894, and being an increase of 23,131 ounces, and in value £92,524. The increase is attributed chiefly to the developments of the Bendigo and Gippsland mines. In 1895, 876,738 tons of quartz were crushed, compared with 898,506 tons in 1894, a decrease of 22,768 tons, increased attention being given to alluvial mining. The yield of gold from the mills was 308,055 ounces, compared with 374,714 ounces the previous year, giving an average of 8 dwts. 14 grains per ton for the whole colony for 1895, as against 8 dwts. 8 grains per ton for 1894. From tailings the yield was 5380 ounces. Some 62,319 tons were treated by cyanidation and chlorination, averaging 1 dwt. 17 grains per ton. Concentrates gave 12,497 ounces. 6181 tons were treated, averaging 2 ounces 8 dwts. 6 grains per ton. Dealing with the separate fields, the following were the quantities of quartz treated, the yield of gold therefrom, and the average per ton in each mining district:—

District.	Quantity treated, Tons.	Yield of gold, Ozs. dwts. grs.	Average per ton, Ozs. dwts. grs.
Bendigo ..	380,733	144,851 18 18	0 7 14
Ballarat ..	271,280	83,823 9 12	0 6 4
Gippsland ..	54,491	54,543 7 3	1 0 0
Castlemaine ..	48,400	34,233 3 1	0 12 11
Maryborough ..	43,870	18,922 19 9	0 8 15
Ararat ..	31,445	12,233 13 17	0 7 13
Beechworth ..	25,517	22,421 14 6	0 17 13

These figures show Gippsland to stand third in respect to tonnage and first as to average, the heavy output at Wallalls having largely helped the former, while the small but exceedingly rich crushings in the Omeo division have been mainly instrumental in making the average so high. The gold yield for alluvial fields shows an increase of 25,594 ounces. The total amount won from this source for 1895 was 279,903 ounces, of the value of £1,119,612, as against 254,308 ounces, valued at £1,017,232 for 1894. The following were the largest yielding alluvial mines during the year:—

Owner.	Ounces.
Prentice Freehold Company, Rutherglen ..	16,704
Berry Consols Company, Smeaton ..	16,473
Madame Barry Company, Smeaton ..	14,839
North Duke Company, Timor ..	13,985
Chalk's No. 1 Company, Carriabrook ..	10,143
Great Northern Extended Co., Rutherglen ..	9,685
Chiltern Valley No. 2 Company, Chiltern ..	9,216

In this branch of mining Gippsland does not occupy so high a position; but this is accounted for by the fact that no deep leads have hitherto been worked here. In the course of a year or so, however, when developments at the Dargo High Plains and the Wallalls Deep Leads have further advanced, it may be anticipated that there will be a material addition in this department, and to the total yield of the Gippsland district. Already a promising commencement has been made by the formation of a strong company, the Madame Barry, on the Dargo High Plains, since the publication of the report, but it is a pity the company should have adopted a title which specially belongs to the Smeaton district. It is bound to cause confusion in the future. This duplicating of titles requires to be rigorously dealt with in the new Mining Bill. During 1895 there were working above and below ground, in connection with the gold mining industry, 29,897 men, and 819 employed in working coal and other minerals, an increase of 6000 during the two previous years. In locating them in their various districts, it is interesting to remember that the average value of gold raised per miner for the whole colony was £92 16s. while the Gippsland average was £100 per man. This latter information is not given in the report, but it is quoted in a return published some months ago by the department:—Ballarat, 6123; Castlemaine, 5254; Beechworth, 4759; Bendigo, 4473; Maryborough, 4361; Gippsland, 3286; Ararat, 1636.



## NEW ZEALAND MINING.

(FROM OUR OWN CORRESPONDENT.)

THAMES, SEPTEMBER 4.

**G**REAT activity continues to be displayed in mining in all parts of the colony, which is not only due to the substantial increase in our gold output, but the steady influx of British coin for the development of our mines on a systematic basis is, perhaps, the chief cause for the steady interest evinced.

Of course, there are thousands of acres taken up in the various centres, where, perhaps, there will never be a colour of gold found, whereas, on the other hand, in the same centres some really valuable properties exist, and almost in every instance the British capitalist is also involved.

Great caution is being observed regarding properties under option, and in many instances a severe inspection has to be carried out, prior to the final settlement of the whole business. Regarding the flotation, this is, I consider, a very wise course to pursue. It not only serves to prove if the property is worth taking up, but it also goes to show that the vendor is not anxious to saddle the investor with a valueless article, and by a continuance of this system no doubt some good will result. On the other hand, these developments may cease just at the very time that they should have been carried on to a further stage, for gold does not exist at any point of contact, and it is quite possible that the developments may have been carried on just where the ore body becomes good, resulting in the abandonment of negotiations.

However, development work on the option system is being conducted in mines all over this peninsula, and under the supervision of very able engineers, so that those who are putting their money in many depend upon it that they will receive justice.

In the Coromandel district there is really nothing of importance to chronicle outside of the Hauraki Company's property. A block of specimen ore from the lowest point of development in this mine is being forwarded to England. This specimen is estimated to contain £300 worth of gold, and the importance of it is that it shows that the lode is rich at the deeper levels, and gives great promise of a continuance of the satisfactory returns which have been obtained from the commencement. Outside of this mine steady exploiting is being conducted, but so far with but poor results.

In the Thames Proper there is nothing new to report. The Thames Hauraki Company are pushing on with their shaft, and the same remark applies to the Mountairi Gold and Kurunui-Caledonian Companies. In the former the extension of the main adit level has been commenced. The shaft has reached a depth of 350 feet, and the whole of the development is proceeding satisfactorily.

In the Ohinemuri district the New Zealand Crown Mines Company have started their additional 20 stamps, and every provision has been made for a further increase if necessary.

## New Find.

I visited a new discovery in the Rotokuhu district. The discovery was made in a special claim, showing on the gold fields plan as the Princess May.

This property is situated at the end of a range of hills leading south from the Karangahake district, and is on a direct line to embrace the south continuation of the Karangahake system of lodes.

The formation unearthed is composed of numerous small veins of quartz of the segregated class, intermixed with the country, both country and quartz shows gold, and yields assay results from £30 to £190 per ton.

In my opinion, this bed or formation is the one that shed the whole of the loose alluvial gold into the Rotokuhu Valley, but whether it will continue at depth remains for further development to reveal.

Regarding the Waihi district, the old mine the Waihi Company are steadily working, there is a steady supply of general milling ore coming to hand, with every indication of a continuance for many years to come.

The Waihi Consolidated Company are passing through a splendid channel of decomposed andesite with their main shaft. The machinery is working smoothly, and the development is proceeding satisfactorily.

The Waihi Silverton have discovered another lode, worth £4 per ton. Whether it will average that remains to be seen.

There is nothing startling from Waitakauri. The big company are now in a fair way to commence treating their ores in their new mill.

Whangamata district is quiet at present, owing to the very wet weather. There is, however, a large amount of option development going on.

At Tairua the Broken Hills reef has been opened up 20 feet below the works opened near the surface. Here the ore body proves to be defined, and fully 11 feet have been cut into it, and still no sign of the hanging wall; 3 feet of the hanging wall portion assays show it to be worth £600 per ton. The whole of the 11 feet of ore so far opened proves to be worth about £100 per ton.

Whether this phenomenal richness will continue remains for development to reveal.

A company has been formed to take over this property, but notwithstanding its richness, and the lode proved strong, masterly, and defined in its downward continuation into the bowels of the earth, I should like to have seen more work done upon it, at a greater depth, before asking the public to subscribe capital for its development. It must be borne in mind that with the developments that have been executed, there is a large show of rich stone, enough, I should imagine, to give good results, and when once the stamps are at work on the output the returns, I fancy, will make itself known to the mining world.

Mr. J. Jenkin Cooper, of Cooper's Exploring Company, returns to England by the outgoing mail boat. He takes with him to place upon the market one of the finest properties in the colony. I refer to the Pura Consolidated Mine, which is now under vigorous development.

The lode has been proved upon the No. 1 level for a length of 250 feet, and now a lower level is in progress upon the same lode, which is also proving to be equally as productive as that met with on the No. 1 level.

Other lodes have been opened, and all carry ore of a payable character.

The property comprises an area of 478 acres of highly auriferous land, with a large stream running right through the property, enough to drive 200 stamps if necessary.

The New Zealand Government have been asked to assist in the construction of a railway from Paeroa into Waihi, but they are not very anxious to comply with the request, owing to the very few claims producing gold returns in the Waihi. If the Government could see their way clear, there is no doubt they would willingly comply, but I am of the opinion they will wait for further developments in some of the mines.

## Gold Returns.

Kurunui-Caledonian (Thames proper) crushed 55 loads of quartz, yield 186 ounces 10 dwts. melted gold, value £508 19s. 9d. Occidental Gold Mining Company (Thames) crushed 24 loads, 60 ounces 17 dwts., value £168 18s. 1d.

Victoria Gold Mining Company (Thames) crushed 110 loads quartz and 40 lbs. picked stone, yield 243 ounces 14 dwts., value £689 9s. 6d.

Waihi Gold Mining Company, 2900 tons, yield £8800. £1000 worth of bullion retained in the new zinc to charge it. The return is practically £9800.

New Zealand Crown Mines, 1097 ounces (no tonnage given), value £1866.

Waihi Silverton, 800 tons produced £1400 bullion.

Waitakauri Gold Mining Company crushed 144 tons, value £585.

Hauraki, 380 tons, yield 2134 ounces, value £6402.

Kapai Vermont (Kuaotunu) crushed 235 loads for a yield of 251 ounces, valued about £550.

## MINING IN THE UNITED STATES.

(FROM OUR OWN CORRESPONDENT.)

NEW YORK CITY, SEPTEMBER 29.

**T**HE end of the Leadville strike has come sooner than any of us expected. The men committed the error of resorting to crime in a form that alienated all public sympathy. The "fire laddies" of the United States are popular favourites. Their practical utility, their record-breaking speed of action, their many gallant exploits, and last, though by no means least, their frequent parades and careful catering to the inborn American love of publicity have long endeared them to us all. When, therefore, it became known that the Leadville strikers had shot a "fire laddie" while engaged in extinguishing a fire, a general cry of disgust and resentment was heard throughout the land. The leaders of the men were wise enough to call a halt. The strikers have offered to go to work at the old rate of wages, and Leadville may now reasonably expect a resumption of activity and profit.

Inasmuch as a good many American mining enterprises are being put in shape for the British public, I think a few words of caution may not prove amiss. I refer more particularly to the care that should be taken in estimating the real value of companies formed for driving tunnels in mining districts. The statements made in the prospectuses of such companies should not be implicitly relied upon, even when the names of respectable men of business and lawyers figure on the list of directors. A very foggy state of things prevails. People who ought to know don't seem to know, and the public at large is supplied with some very erroneous guidance. The stock exertions made are to the effect that, by Federal law, any person may commence a tunnel on unoccupied ground, and thereby acquire the right of ownership of all veins cut in driving the tunnel for a distance of 3000 feet from its commencement. This ownership is asserted to over-ride the rights of all locators at surface, and to extend for 1500 feet on each side of the tunnel, as well as from the apex of each vein to as far as it may extend in depth. The usual way of stating these claims is well exemplified in a prospectus of a concern called the King Solomon Tunnel and Gold Mining Company of Colorado, which contains a remarkable report from a "Professor," who thus expresses himself:—

"Under the most recent construction of the law governing tunnel locations the company owning the King Solomon Tunnel has acquired 3000 feet square of comparatively virgin ground in the geological centre of that which is now conceded to be the largest and richest gold-bearing area as yet discovered on the globe. From its entrance to its terminal this tunnel will pass through eruptive rock peculiar to the Cripple Creek district, and will at a maximum depth of 500 feet cut almost at right angles a zone of mineral-bearing fissures, from which gold is now being produced to the amount of \$1,000,000 per month at a less cost per ounce than it is or has ever been produced from other quartz veins in any part of the civilised world. On this line, crossed by the King Solomon Tunnel, there was but one producing mine in the summer of 1892; now nearly one-half of the 163 shipping mines of the district are ranged along its surface, and yet less than one-fourth of that surface has been intelligently and systematically explored. In my judgment finite minds cannot estimate the possibilities of that particular section of this wonderful district."

In the body of the prospectus containing the report from which I have quoted there appears the following additional statement:—

"Under the mining laws of the United States Government, the owners of a tunnel site are entitled to these rights and privileges:—To compensation for draining existing mines located on the line of the tunnel; to royalties for the use of the tunnel as an avenue for the conveyance to the surface of ores from the deep levels of existing mines; to 1500 continuous feet in any direction along the course of any and all veins of ore discovered and cut by the tunnel in its progress; and to 1500 continuous feet in any direction along the course of any and all ore veins cut by the tunnel that may be discovered by other parties after the date of the location of such tunnel." This statement was apparently entitled to popular credence, because the document in which it was set forth was issued by persons of good business reputation and legal standing. The prospectus was circulated by the well-known house of Bigelow and Co., of Boston. The company's lawyers were at eminent Boston firm, whose senior partner was a director and the treasurer of the organisation.

The capital was fixed at 2,000,000 shares of \$1 each: 17-20ths went to the promoters and 300,000 were assigned to the Treasury, and to quote the words of the prospectus, were "now offered at a very low price for a limited period." The "low price" was 15 cents per share, and at this figure the public invested to some small extent. Presently the want of working funds was felt, and an application was made to a New York firm to advance the required money. Then, for the first time, was an investigation made as to the truth and accuracy of the statements in the prospectus. The firm applied to happened to be mining experts and well acquainted with mining law, instead of having financial knowledge only. They at once challenged the assertions of the "Professor" and the alleged legal status of the enterprise. They were assured by the director who was negotiating the advance that the eminent Boston lawyers would vindicate the prospectus and dispose of their objections. An attempt to do this was made by the lawyers in question, who sent a lengthy letter, bristling with legal terms, but the financiers immediately proceeded to vivisection the lawyers with the result that the loan was not granted.

The real state of the law is very different from that asserted by the King Solomon Company. Anyone is at liberty to commence a tunnel on unappropriated mineral land belonging to the United States. He may drive the tunnel to a distance of 3000 feet, and if in so doing he cut any vein "not previously known to exist," and not apexing within the limits of surface

The total amount of dividends paid out by mining companies since the commencement of quartz companies in the colony (1867) to the end of 1895 was £40,121,214. The dividends for 1895 amounted to £438,507 0s. 7d. The amounts distributed in the different mining districts were as follows:—

in the different mining districts were as follows:—  
Ararat, £38,425 6s. 7d.; Ballarat, £86,061 11s. 10d.; Beechworth, £90,882 5s. 8d.; Castlemaine, £35,255 3s. 2d.; Gippsland, £56,240; Maryborough, £40,800; Bendigo, £130,842 13s. 4d. The largest sums were paid by the following companies:—  
The largest sums were paid by the following companies:—  
Madame Berry, Smeaton, £32,850; Long Tunnel, Walhalla, £27,000; South German, Maldon, £27,600; Prentice Freehold, £27,000; Berry Consols, Smeaton, £22,000; New Rutherglen, £24,000; Berry Consols, Smeaton, £22,000; New Prince of Wales, Bendigo, £20,625; Lady Barkly, Bendigo, £19,800; Mag'jala-cum-Moonlight, Stawell, £18,518; Long Tunnel Extended, Walhalla, £17,040; New Red White and Tunnel Consolidated, Bendigo, £16,875; North Duke, Timor, £16,250; Windmill Hill, Bendigo, £15,933; New Moon, Bendigo, £11,700; New Loch Fyne, Matlock, £11,100.

No great importance should be attached to the aggregate amount of dividends paid by each mining district, as no comparison can be made in the absence of the amounts of invested capital. For instance, it will be observed the Walhalla Long Tunnel paid nearly half the total amount paid by Gippsland, which is only exceeded by three other districts—viz., Bendigo, Ballarat, and Beechworth. The figures only show the amounts paid to registered companies, for obviously no account can be taken of the earnings of co-operative parties and individual miners. It may happen—indeed it is not at all improbable—that a district which pays companies only trifling dividends may give a lucrative return to small parties, and as a case in point, the Queenstown and Upper Yairi district, the Mount Elliot and Eakdale fields, in the Upper Murray country, may be quoted. The gold yield of a district is the true test; time alone is the philosopher. At the rate Gippsland is being opened up the *raison d'être* so necessary to make clear now will in a few years hence have passed away. Of course, it is necessary to remember that in accordance with the mining laws of the colony parties working miners' rights are not compelled to furnish a statement of gold won. Such being the case, districts like Yackandandah, where the Hon. J. A. Wallace has hundreds of acres taken up under miners' rights, and working four of the largest dredging plants in Australia on Staghorn and Rowley flats, and McCombes, where every square yard has been tested and known to yield from 1000 to 1500 ounces to the acre, are retarded by the secrecy permitted in regard to proprietary concerns.

If registered companies are compelled to furnish quarterly statements there can be no excuse for exempting individuals. The colony is the sufferer by this unwise system, and in the New Mining Bill the Minister should insert a clause compelling banks within the colony to furnish a statement of gold purchased, and the district it came from. On the principle that nothing succeeds like success, Yackandandah through lack of gold returns is fast becoming a neglected field. I have some startling information before me as to the methods adopted of discouraging English capitalists from paying attention to the rich resources of this locality, and will deal with the matter in a future article.

Some interesting facts are given in the report regarding the deep mines of the colony; nine were over 2500 feet deep at Bendigo, and four were over 2900 feet in depth, the deepest being Lansell's 180 Mine, 3302 feet, and the Lazarus Company 3024 feet, the former being the greatest depth yet reached in any mine in the colony. The following were the deepest mines on the other gold fields in Victoria:—

	Feet.
Magdala-cum-Moonlight, Stawell .. ..	2,409
South Star, Ballarat .. ..	2,030
Homeward Bound, Beechworth .. ..	800
Great Southern, Rutherglen .. ..	322
Welcome, Alexandra .. ..	730
Hope, Wood's Point .. ..	530
Ajax, Castlemaine .. ..	1,116
North Cornish, Daylesford .. ..	990
Derby United, Maldon .. ..	1,350
North Long Tunnel, Walhalla .. ..	1,936
New Blucher's Reef, Maryborough .. ..	786
Lord Nelson, St. Arnaud .. ..	1,220

While there is no account given of the number of mines in operation, nor the number of claims pegged out during the year, some idea may be arrived at by the statement made by Mr. James Stirling, Assistant Government Geologist, that up to the present 3179 lines of reef had been proved. The list of localities in which there was a general revival and important discoveries includes Rokewood, Pitfield Plains, Mount Elliott, Omeo, Dargo High Plains, the Bomm River, Bonang, the Snowy, Walhalla, Matlock, Woods Point, and the Upper Yarra. The prospecting carried on in the latter area will be found to have an important bearing on future mining operations of the colony, for since the publication of the report on auriferous sandstone mountain has been discovered, now called the Victorian Mount Morgan, thus adding a practically new gold field of considerable promise. With the singular exception, Steiglitz was the only district on a rapid down grade, and continues to this hour "unheard and unsung" in public favour. The "sizzing" out of the New Mariners, the mishap by fire of the United Albions, the diminishing yields from the Alliance and the Waterloo, and, above all, the flotation at home of the Ballarat (Steiglitz district) Gold Mines (Limited), which has met with disfavour and condemnation from all quarters, has sunk that once popular and still rich district to zero. Reference is made to the introduction of English capital to assist in developing known auriferous leads and lodes, and to the efforts of the department to prevent worthless mining properties being foisted on English capitalists. In touching on this point, Mr. Travis writes:—"Carefully prepared reports, accompanied by the necessary plans, giving full and reliable information in regard to the proved auriferous leads and lodes of the colony have been sent home at regular intervals to the Agent-General in London to be made available to the investing public." In spite of cautions critics who snarl at the Mines Department, it can safely be said that it does all in its power to make known the colony's resources in England, and to check unscrupulous promoters who endeavour to place upon the London market mining properties of little or no promise. The rapid survey plans have been a great help in this object. The English public are to blame if they do not make a full use of the Agent-General's office to verify promoters' statements and to obtain authentic information as to the character of certain of our auriferous areas. The Minister, Mr. H. Foster, is to be congratulated on the year's result and on the fact that his department is daily growing in importance. The compilation of the report has become a technical publication of very high order, packed with a mass of information that should prove most useful in every branch of the mining industry. It is a valuable work of reference, and reflects great credit on the various writers, in particular, Mr. Travis, the Secretary, Mr. R. A. F. Murray, the Government Geologist, and Mr. James Stirling, Chief Assistant Geologist.

The Omeo Gold Mining Company of India (Limited) have sold the gold obtained in August for £19,306 6s. 4d.



locations made prior to the location of the tunnel, he has the right to 1500 linear feet of such vein as fully as though the discovery had been made in the ordinary way from surface. The 1500 feet in question may be measured partly on one side and partly on the other side of the line or axis of the tunnel, or it may be taken wholly on one side. The tunnel must, however, be continuously prosecuted "with reasonable diligence," and a failure to do work for a period of six months is "considered as an abandonment of the right to all undiscovered veins on the line of such tunnel." There is thus no proprietorship of an area of 3000 feet square. There is no right to compensation for drainage, or to royalties for conveyance of ores. In order to determine whether any tunnel company has a valuable undertaking it is necessary to know very much more than is set forth in any prospectus I have yet seen. First, the date of location must be ascertained. Secondly, the history of the work must show that at no time has a six month's suspension taken place. Thirdly, the dates, boundaries and developments of all surface locations along the line of the tunnel and for 1500 feet on each side of such line must be looked into. These data, when pieced and fitted together, will show to what extent the tunnel proprietors will benefit by any veins met with in the course of their work. In many cases it will be found that no rights of any value exist; especially where, as in the case of the King Solomon tunnel, the ground to be opened up is occupied by a number of established and well developed mines.

I have made a somewhat long (but by no means exhaustive) story of this, because it is to the interest of mining in general, and American mining in particular, that investors shall be duly warned of pitfalls into which they may otherwise easily stumble. The warning is all the more important at the present time, as attempts are being made to induce English investors to purchase stocks in American mining tunnel companies which, although in highly respectable hands, so far as business standing goes, are yet devoid of intrinsic value owing to their legal status being defective. I understand, for example, that the Bull Hill Gold Tunnel Company, with a capital of 2,500,000 shares of \$1 each, is now, or will shortly become, a vigorous applicant for your cash. This concern is controlled by some of the leading officials and members of the Denver Mining Exchange, and for general respectability leaves nothing to be desired. Its tunnel is admirably located, and will entirely traverse Bull Hill, which, as most mining experts know, is next, perhaps, to Battle Mountain, the richest section of the Cripple Creek district. Its prospectus says:—

"It was not expected to reach any mineral under 700 or 800 feet, but a vein has quite recently been cut, which is being followed, and gives promise of value, and which it is believed will soon lead to a valuable ore chute. The next 800 feet will pass through one of the most valuable mineral tracts ever known to exist. The Pike's Peak vein has already produced over \$400,000. The Mineral Rock vein is shipping high grade ore. The John A. Logan and the American Eagle, owned by W. S. Stratton, which has developed into a great mine, both pass through our territory. It also crosses and cuts such known veins as the Pharmacian, Zenobia, Barnes, Ida Bell, Tommy Crouse, Garfield, Orpha May, Favourite, Pattie O, Kalamazoo, New Zealand, Buena Vista, Emma, Jack Rabbit, Anna Brett, Ramona, Silver Tip, Londonderry, Mollie Maguire, Climax, Bertha, Whale, Henry Coby, Star of Bethlehem, Hidden Treasure, How, Wild Horse, and many others. In everyone of these properties the ore has been found to be of greater value with increased depth. What will be the result when these veins are uncovered in the tunnel at the depth of 800 to 1000 feet? The ore of this hill is mostly of a very high grade, running from \$30 to \$1000 per ton. It is claimed that no less than about 40 veins cross Bull Hill north and south, all opened up within the last 30 months. This company will own 1500 feet of every vein so found, and which it will cut in its tunnel, with the exception of two or three which were prior locations. From this it will be seen that if this company, in driving its tunnel 3000 feet, shall cut or cross 30 veins it will own 1500 feet of each and every one of them, or, in other words, own 30 developed mines. It will be seen that this company is not engaged in an experiment, but is simply developing a property of great value."

If the statements be accurate, the shares of the Bull Hill Gold Tunnel Company are enormously valuable, and instead of being paddled about, as is now the case, at from 2 to 3 cents, they should command at least an equal number of dollars. If, too, the statements be accurate, what will become of the numerous companies now at work on Bull Hill? They will all have to render an account to the Tunnel Company for the ores they have respectively shipped from the numerous veins referred to in the prospectus. But in reality no such peril is in store for them. The rights of a tunnel proprietor, as against surface locators, are to veins "not previously known to exist" and "not appearing at surface." All, therefore, that the Bull Hill Gold Tunnel Company can legally acquire by its enterprise will be 1500 feet of any blind vein that it may chance to cut in ground not occupied by some senior surface locator.

It will be seen, therefore, that the claims set forth in the prospectus are incorrect; and it is to be hoped that none of your brokers will be misled into selling the stock to English investors on any such basis.

I hope I have made it clear that my criticisms are not intended to cast any aspersion upon the perfect good faith of the King Solomon and Bull Hill Companies and similar undertakings. The character of the parties concerned and their own contributions to the funds of the companies preclude any idea of their representations and intentions being otherwise than honest. Their error lies in a want of due investigation.

**BELGIAN COAL PRODUCTION.**—The British Consul at Antwerp notes that the production of coal in Belgium during 1895 amounted to 20,414,849 tons against 20,544,421 tons in 1894. The exportation during 1895 was as follows:—Coal, 4,618,980 tons; briquettes, 460,313 tons; coke, 869,409 tons. The shipments into the United Kingdom were 73,765 tons of coal, and 16,405 tons of briquettes. The British Vice-Consul at Ghent remarks that the importation of coal from the British Isles continues on a large scale. Thus in 1893 the yearly return showed 110,000 tons, and in 1894 it amounted to 143,000 tons, and was 131,000 tons in 1895. The greater part of this coal comes from Goole and Newcastle-on-Tyne, and is carried at very low freights by the regular lines trading with Ghent. The consular report states that without such facilities it would be difficult for British mining companies to compete with the Mons and Charleroi coal, which is extensively used, as is also that from Germany. The large factories of all kinds for which Ghent is famous constitute it an active coal market in which neither British, Belgian, nor German coal secures a monopoly.

**NORTH OF ENGLAND INSTITUTE OF MINING AND MECHANICAL ENGINEERS.**—A general meeting of the members of this institute will be held this afternoon at Newcastle-upon-Tyne, when the following papers will be open for discussion:—"The Blasting Efficiency of Explosives," by Bergassessor Winkhaus, "Safety Explosives," by Bergassessor Winkhaus, "Photography in the Technology of Explosives," by Mr. Alfred Sierch, "The following papers will, as a rule, be read:—"Notes on the Venterskroon Gold Fields, South African Republic," by Mr. H. B. Bunkell, "A Spring Coupling for Winding or Haulage Ropes," by Mr. H. W. Hollis, "The Danger of Employing Safety Fuses for Blasting in Fiery Mines," by Bergassessor Winkhaus.]

## MEETINGS OF MINING COMPANIES.

### LA YESCA GOLD AND SILVER MINES, LIMITED.

THE ordinary general meeting of shareholders in the La Yesca Gold and Silver Mines (Limited) was held on Tuesday, at Winchester House, the chair being occupied by Mr. GEORGE WILLS, The SECRETARY (Mr. S. Banning) read the notice convening the meeting.

The CHAIRMAN said: Ladies and Gentlemen—I presume you will take the report and balance-sheet, which you have before you, as read. You will notice that the whole of the capital of the company has been issued. You were given to understand at the last meeting that the capital at our disposal would, in all probability, be sufficient to put the mines on a paying basis. Why this was not the case I shall endeavour to explain presently. The item in the balance-sheet "proceeds of bullion sold," amounting to £1080 11s., covers a period of about 12 months. You were informed at the last meeting that Mr. Arthur L. Pearce has been appointed consulting engineer to the company. His advice and assistance have been of great value. He visited the property at La Yesca last year, and the substance of his report was duly issued. Having found that the work was being carried on almost entirely under the supervision of Mr. A. F. Miller, the assistant manager, owing to the general manager being incapacitated by ill-health, Mr. Pearce thought it desirable to appoint Mr. Miller as general manager. Unfortunately, the heavy rains had caused the lower workings of the Padilla Mine (formerly called "Ziropan") to be filled with water about two weeks previously to Mr. Pearce's visit. However, as far as possible, he thoroughly examined this mine, and his conclusions were such that the directors thought it well worth while to open up the lower workings below the water level. The manager obtained a hand pump, &c., from Guadalajara, and succeeded in clearing the mine. Considerable work has been done, and from various points ore has been extracted, but we have not gone deep enough to reach the solid ore bodies below the old workings. Mr. Pearce said of this mine:—"From its power, and the high grade nature of its ore, it presents a proposition well worth considering, and will, no doubt, justify the investment of a further sufficient amount of money to open it up in depth, and work it on an adequate scale." It has been a great disappointment to us that, although energetic work has been carried on, we have not as yet succeeded in getting into the more solid ground below the old workings. We fully expected this mine to produce a large quantity of pay ore from the beginning of this year. In consequence of the long delay and somewhat unsatisfactory reports from the manager, we, in consultation with Mr. Pearce, decided to request Mr. A. C. Young, an expert well known to Mr. Pearce, who was in Mexico, to go to La Yesca, and inform the board very fully on all points. His report, in the first place, I am glad to say, fully confirms the good opinion we had of our present manager. He says—"I consider his knowledge of the country, its people and the language, to be of great service to you, and I further consider he is thoroughly honest." Mr. Young states that he considers the property one of the best prospects he has ever seen in the country. This is an important expression of opinion, as Mr. Young's experience of Mexico extends over a period of 10 years. He points out, however, that further development is necessary. He says that the workings, from which the manager obtained the ore which has been crushed, were incapable of giving a sufficient supply to keep the mill constantly running. The directors, therefore, stopped all work here until they had discussed with Mr. Pearce the future working of this section of the property. Mr. Young advises that a tunnel should be driven below the old workings about 55 metres in length, at a depth of about 50 metres from the present workings, and adds:—"Taking into consideration the enormous width and strength of the lode, and seeing that the ore, in your present mine, although bonchy, appears to be improving in depth, I think the chances are with a depth of 50 metres more, there is every probability you will cut the lode where the metals exist more compactly." We should also by this means drain the mine. Mr. Young continues:—"Your extraction charges would be considerably reduced, and you would also have proved a lode not only at 50 metres greater depth, but also at a distance of about 450 metres from your present workings." I regret that Mr. Pearce has at the last moment found it impossible to be present. He is, however, quite in accord with Mr. Young on this subject. The directors purchased a Hornsby oil engine and pump, with all the latest improvements, which has been sent to the mines and can be utilised in due course. We expected that long ere this the manager would have reported some discovery at the San Miguel Mine. The drainage on the crosscuts in the tunnel has been continued as Mr. Young advised. He says that the old workings above have been enormous, and from the character of the rock and the dumps, and the small stones which can be found in the dumps, containing specks of metal, he is confident that large quantities of very rich metal have been extracted at this point. The manager's latest reports are as follows:—Cable August 22:—"San Miguel. A streak of ore gives an average assay of 13 dwts. gold and 160 ounces silver per ton." Cable September 13:—"Crosscut No. 2. There is a streak of ore that assays 17 dwts. gold and 130 to 140 ounces silver per ton; width not yet determined." Letter dated September 9:—"Vein crosscut No. 1 is coming into ore again. Vein crosscut No. 2 is 8 to 10 feet wide. The first 2 feet gave scattered bunches, assaying 63 ounces silver; the 2 to 3 feet on hanging wall give bunches assaying 135 ounces silver, and 17 dwts. gold. The intervening space also has these bunches, but they appear mostly on the hanging and footwalls. The whole vein is a broken quartz, the massive bunches being ore and the rest barren. These bunches are mostly on the northerly side of the crosscuts, the southerly side in both No. 1 and 2 veins being barren. This fact confirms an idea I have formed that the north and south vein was broken up at the intersection of the east and west vein. The former does not appear in the Arroyo, as it should do if not interrupted. I look for a solidifying of the veins as we drive north." Mr. Pearce states that the outlook is sufficiently good to justify the continuation of the work, but it is for you, ladies and gentlemen, to consider whether you will continue. At a conference we had with some large shareholders, the proposal of which you have had notice was unanimously approved. It quite depends on the support you give, and the terms we can arrange with the vendor, whether we proceed with the issue, and thus be in a position to carry on the work recommended both by Mr. Young and Mr. Pearce. We have done our best to make the company a success, but, as you are well aware, in the opening up and development of a mine there are always delays and unexpected difficulties; and the circumstances which have arisen have been beyond our control. We are still amongst the largest shareholders—I may say we are the largest shareholders—and have spared no time or trouble in conducting the business. We have taken no fees since March, 1895, and have given up our claims for the amounts due. We do not hesitate to place ourselves unreservedly in your hands, as we feel assured there is every reasonable hope of ultimate success. I now beg to move the adoption of the report and balance-sheet.

Mr. FREDERICK MAJOR seconded the motion.

The SECRETARY, in answer to questions, said that the rate of interest payable to Mr. Padilla was 6 per cent., and as to his rights of foreclosure, the only thing was that if the company made any default the original deed came into effect, but he might say that they were now negotiating with Mr. Padilla with a view to obtaining some modification of his rights, and unless they did get a reasonable concession from him it was not intended to issue the new capital at all. If the new scheme was not carried out the company must go into liquidation.

Mr. MAJOR, in reply to a SHAREHOLDER, said it would be very difficult to reconstruct the company on account of Mr. Padilla's interests. It was true there had been two or three reconstructions already, but not under the present directorate.

A SHAREHOLDER asked if the board had received any promise for the subscription of the new capital.

The SECRETARY said they had no written promises; but he had seen a large number of shareholders, and they all thought the scheme was a wise one, and, to a great extent, they would come in and take their proportion of the new shares.

In answer to another question as to how long it was expected the new capital would last, the CHAIRMAN said the work of development had already advanced to a certain point, and at any time they might, in the San Miguel, come upon very good ore. This opinion was confirmed by a letter which they had that day received from Mr. Pearce, and Mr. Young was also in accord with Mr. Pearce as to the value of the mine. All the expert opinion was, therefore, to the effect that all that was wanted was a little more capital. The question for the shareholders to decide was whether they would throw up the sponge just when they were about to get something out of the mine, or whether they would adopt the suggestion offered to them, and furnish more capital to bring the venture to a profitable issue.

The resolution was then put and carried *unanimously*.

The retiring directors, Mr. A. Wills and Mr. F. Major, were re-elected, and with the concurrence of the directors Messrs. Updell Green, Watson, and Zaccani were appointed a committee to confer with the board. The auditors were also re-elected.

The proceedings terminated with a vote of thanks to the Chairman.

**SPECIAL MEETING.**

An extraordinary general meeting was then held, at which the following resolutions were passed:—(1) "That the capital of the company be increased to £210,000 by the creation of 40,000 shares of 5s. each." (2) "That such shares shall be called new shares, and shall entitle the holders thereof to the profits of the company preferentially until dividends equal in the whole to 5s. per share on the new shares shall have been paid; and after such sum of 5s. has been paid in dividends on each new share, then the new shares shall rank equally for dividend *pari passu* with the ordinary £1 shares." (3) "That such new shares shall, in the first instance, be offered to the present holders *pro rata* as nearly as possible." (4) "That such new shares as may not be taken by the members may be disposed of on such terms as the directors may determine."

The proceedings terminated with a vote of thanks to the Chairman.

### HANNAN'S TREASURE TROVE, LIMITED.

The first ordinary general (statutory) meeting of the shareholders in Hannan's Treasure Trove (Limited) was held on Monday, at Winchester House, Old Broad-street, under the presidency of Mr. CHARLES CLARK.

The SECRETARY (Mr. Fred Moore) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—This is, as you are aware, the statutory meeting of the company, held in accordance with the provisions of the Joint-Stock Companies Acts, and your directors are glad to have the opportunity of meeting you, although they have little to communicate beyond that which has been already made known to you by circular. Our properties are located in the western portion of the Great Kalgoorlie gold belt, in the neighbourhood of the Lake View East, the Adelaide, the Star Hill, and other well-known mines, on a direct line with the celebrated Brownhill lode, through the Royal Mint Mine, and parallel with the course of the Great Boulder lode. They were already registered in the name of the company's representative in West Australia when the prospectus was issued, and they have since been duly and definitively transferred into the name of the company itself. Your directors consider that they have been fortunate in securing the services, as local superintendents, of Mr. H. W. Taylor, a gentleman of large and matured experience, whose personal acquaintance they were glad to make in London, and in whom they feel that full confidence can be reposed. The development of the property is proceeding satisfactorily. There were originally, as you will remember, two prospecting shafts on the mine, 254 feet apart, by means of which the lode had been proved and the underlie approximately gauged. Our agents accordingly began their development work by putting down two new shafts on Southern Block, leave 1203, viz.: No. 1 intended to catch the main lode at about 150 feet, and No. 2 intended to test the other lode, running parallel to the main lode. Shaft No. 3 was soon afterwards started on the Northern Block, leave 1643, with the object of catching a lode discovered in an adjacent lease—Royal Mint East. This shaft will in future be known as shaft A, while No. 3 will be another new shaft now sinking to the east of No. 2. In regard to these three shafts Mr. Taylor writes as follows on August 26:—"I have called for tenders for sinking a third shaft at a distance of 300 feet east of No. 2. This shaft I shall call No. 3 in future. On reference to the plan you will perceive that these three shafts are placed so that when connected by drives at the 100 feet level, and drives also run out from No. 1 to the western and from No. 3 to the eastern boundary, the whole width of the property will be crosscut at that depth, showing what we really have on this portion of the property." Shaft No. 1 is now 113 feet deep, and is closely timbered throughout. A fine body of ore was struck in the course of the sinking, every trial of which by pan assay gave a trace of gold. A crosscut driven from the 108 feet level in this shaft has gone through the lode, and it is our intention to carry out the scheme suggested in the letter by opening out the ground in that direction, and then to crosscut right through that part of the property. We have also begun to crosscut in No. 2 shaft at the 60 feet level as well as at a point in A shaft, and altogether some 300 feet of crosscutting has been done up to the present time, and we are continuing it as speedily as possible above the water level. We are engaged actively in surface work, and particularly in preparing for the erection of pumping and hoisting machinery to deal with the remarkable inflow of water which has taken place in the mine, equal to more than 7000 gallons in the 24 hours. This water will, no doubt, speedily become a source of revenue, for we have been already approached on behalf of neighbouring mines, who are offering to purchase as much as we can spare. The machinery is now in transit by the railway, and altogether I think you will agree that our position and prospects are satisfactory. There is just to be no doubt that a large body of ore was struck in the A shaft before the inflow of water occurred. We have also proved two lodes in addition to those mentioned in the prospectus, the width of which is stated to be 10 feet in the one case, and 12 feet in the other. The width of the original lodes has not yet been mentioned. Two of the reefs are reported and believed to be the Brownhill and the Royal Mint lodes. A good deal of local interest has been shown with regard to the progress and prospects of the mine, and I have no doubt we shall find there are dealings in shares as soon as the people locally have been in a position to obtain delivery of the certificates and transfers. I do not know that the mine manager's report else I need say to you except to read the mine manager's report which arrived this morning; it is dated August 29:—"During the past week work has been confined principally to surface; four men engaged building office and blacksmith's shop, which are now completed; three men cutting mine timber, and clearing site for new shaft, which will be known as No. 3; the position of shaft 250 feet east of No. 2 and 130 feet west of east boundary; tenders have been called and accepted for sinking shaft 100 feet from surface; contractors start work Monday." If any gentleman has any questions he would like to ask, I shall be very happy to answer them.

There being no questions, a vote of thanks to the Chairman terminated the proceedings.

**THE MINERAL RESOURCES OF GREECE.**—It is stated that English capitalists are beginning to pay attention to the mineral resources of Greece, and several applications with a view to concessions have lately been received by the Greek Government.

From Athens it is stated that two mining engineers, representing an important English company, have lately arrived there with the object of securing a concession for an iron mine.



## GOLDEN LINK GOLD MINING CO. LTD.

An extraordinary general meeting of the shareholders in the Golden Link Gold Mining Co. Ltd. was held on Monday at the Cannon Street Hotel, Mr. ROBERT WALKER, J.P., presiding, for the purpose of considering a proposal to amalgamate with certain other gold mining companies owning properties in the Hannan's District, W.A.

The SECRETARY (Mr. W. Cooper) read the notice convening the meeting.

The CHAIRMAN said: As you are aware, this meeting is called for a special purpose—namely, to consider an agreement by which our own company and three other companies on the same field are to be amalgamated. The matter will be fully explained, and the various legal points dealt with by Mr. Bilbrough, our solicitor, who can do a great deal better than I can. I may say, however, that it is that a great deal better than I can. I may say, however, that it is that a great deal better than I can. I may say, however, that it is that a great deal better than I can.

Mr. SCOTT-LINGS thought it would be convenient for him to give the explanation to which every shareholder in the company was entitled. He rose as the representative of a very large body of shareholders, and spoke with the authority of the holders of some 50,000 shares. His name might be familiar to those present as one of the signatories to a circular sent out some little time ago, and signed also by Messrs. Stoneham & Messenger and Messrs. Woollner & Co., the considerations which led to the sending out of which he would proceed to explain. His desire was to be perfectly frank with the shareholders, and also perfectly fair with the directors, and he would remind the meeting that destructive criticism was the easiest thing in the world and also the most futile, and that when they were finding fault with anyone who had their affairs in hand, the finding of that fault or any consideration arising therefrom came with very much greater force if they were prepared to set before the governing body some definite scheme which they considered should be carried out. In order to make himself clear he needed to be somewhat retrospective. As appeared from the newspapers, it was evident there had been a certain amount of dissatisfaction on the part of the shareholders with the management of the Golden Link Company. He was a large shareholder, and to some extent shared that dissatisfaction, the outcome of which was an endeavour on his part to put himself in communication with some of the large shareholders. He saw Messrs. Stoneham & Messenger and Messrs. Woollner & Co., and suggested that before taking any steps to induce the directors to call the company together they should formulate, if possible, some scheme which would, in their opinion, be for the benefit of the shareholders. The outcome of those deliberations had been the elaboration of the scheme which was embodied in the contract to be submitted to the present meeting. Now, admitting that the directors were not showing the amount of enterprise which he would wish to see, they must bear in mind that the company was primarily constituted as a mining company, and not as an exploration company, and it was quite possible that the directors felt themselves to a great extent hampered by their articles of association. Taking this view, he and the gentlemen whose names he had mentioned, felt that they should endeavour to put the company on a broader basis. They knew the company had a considerable amount of capital in hand, that its holding of land had been considerably reduced by the formation of subsidiary companies, and that it was left with 29 acres and the capital referred to. At that time he was chairman of the Eclipse Gold Mining Company, and although a large shareholder in that undertaking, his interest in the Golden Link Co. was very much larger, and so far as he knew neither Messrs. Stoneham & Messenger or Messrs. Woollner & Co. had any holding whatever in the Eclipse Mine. The same remark applied to the Hesperus Company, of which also he was chairman, but in which his pecuniary interest was purely nominal. In debating the question of the future of the Golden Link Company, amalgamation with other companies was suggested, and this ultimately developed into the fusion of the Eclipse, Hesperus and the Great Boulder East Extended. So far as the Eclipse was concerned, that property was an excellent one, and it was sufficiently capitalised in cash to carry on operations. That company was in every sense of the term perfectly able to stand on its own footing and carry out the intentions for which it was originally formed. So far as the Great Boulder East Extended and the Hesperus were concerned, the interests of the Golden Link were already identified to a considerable extent with both of them, inasmuch as the Golden Link held a large block of shares in the Great Boulder East Extended, which was one of their subsidiary companies, and had also subscribed for a considerable block of shares in the Hesperus. It appeared to them that the best method of utilising those shares was to include those companies in the amalgamation upon certain terms, and those terms were, as far as possible, arranged to be fair to all parties concerned, the position of the Golden Link Company being fully recognised, inasmuch as they were considered entitled to receive at a very much higher rate in any new company which might be formed for the purpose of amalgamating these companies than the other companies, and the rates were so fixed that the shareholders in the Golden Link would receive five shares in the new company for every four in the old. The Eclipse Company was to come in at par, but in respect of the vendors' shares, a rebate was to be made of some 4,300 shares from their par value, so that they were to come in at par less that rebate. As far as the Hesperus was concerned, they laid it down as a principle that anybody who had subscribed to that company should receive in full, and that any rebate considered necessary and fair for the inclusion of the Hesperus Company in the amalgamation should be taken from the vendors' holding of shares. So far as the Great Boulder East Extended was concerned, having regard to the large holding which the Golden Link Company had in that undertaking, the basis of calculations was brought down, so that in place of 65,000 shares at present issued to that company, the issue from the new company would be some 31,000. The basis thus arranged was therefore considered equitable for all parties concerned, and was arrived at so as to be acceptable to the Golden Link shareholders who were represented at that conference, and who had no interest whatever in the other companies proposed to be brought in. It was suggested that a new company should be formed, with a nominal capital of £950,000 in £1 shares. The amount required for the inclusion of the four companies would be £269,000, the issued capital of those companies at the present moment being £316,320. They thus had, in the first place, a reduction in the capitalisation of the amalgamated companies of £47,000, which in itself was a step in the right direction. They would acquire 110 acres of land, and the £269,000 mentioned would include the purchase price of the four companies. The new company would receive something over £50,000 in hard cash and machinery, which was already in Australia, of the value of £8,000 or £9,000, so that the actual cash represented by the land would be only a trifle over £200,000, with all the improvements made upon it since the formation of the various companies, and the land would be capitalised at something under £2,000 an acre. The new company would be provided with a working capital sufficient to carry on the development of the most favourable portions of the property, and he could further say that this movement did not constitute the Alpha and Omega of the ideas at present in the minds of those who were acting in the matter. They had provided a very large surplus capital, the intention being to incorporate in the new company certain other companies on terms which, at any rate, would not be to the disadvantage of the new company. It would be understood that it would be no easy matter to reconcile the various conflicting interests which had existed amongst these four companies, and he might inform the meeting that, in consultation with Messrs. Stoneham & Messenger and Messrs. Woollner & Co., he had been working very industriously in this business for some months past. The details were, of course, arranged subject to confirmation by the shareholders in the various companies concerned. Now, he desired to be perfectly frank, and to explain clearly his own position. The issue of shares in the new company which would be required to satisfy the payment to the four companies would be £269,000 odd. In the first place, he had undertaken to take up sufficient shares in the new company to bring that amount to £270,000,

to provide the new company with some present cash for immediate requirements; he had also undertaken to pay the cost of formation, subject to the repayment to him of his expenditure within three months. He had come to the conclusion, however, that he would not ask the company to repay that sum in cash, but he would be prepared to take payment in fully-paid shares, and this meant that he would have to take in the new company shares to the value of something over £2,000 straight away. The only consideration he would receive would be that he would acquire a call upon a certain number of shares in the new company at a premium, and unless he could sell those shares above that premium he could not make a single penny out of the transaction, and the significance of that to the shareholders was that the value of their shares in the Golden Link must stand at £1 6s. 3d. per share before he could get any profit whatever. He did not think it was his province to enter into details with reference to the Hesperus and Eclipse Companies. He might say, however, that the Hesperus Company was the proprietor of forty-eight acres in Hannan's district—land which he had every reason to believe was very valuable, because, prior to joining the Board of the Hesperus Company, he received a perfectly independent report upon the property, which was supplemented and supported by the fact that within the last few days overtures had been made to the Hesperus Company by a neighbour who wished to acquire a portion of the land in question, which he did not assume that neighbour would care to do unless some value were attached to the land. With reference to the Eclipse, he could speak with more authority, and would say emphatically that if he had not a single share in that company he would, as a shareholder in the Golden Link, be prepared to accept the proposal to allow the Eclipse to come into the amalgamation. In conclusion, he wished to repeat that the basis upon which the negotiations had been conducted had been one of a desire to be fair and just to all parties concerned; to take no advantage of anyone, but to carry out an arrangement that would be beneficial to the shareholders of all the companies concerned.

The SOLICITOR, replying to several questions asked by Shareholders, said the Golden Link Company had a cash balance of £42,841 at the bank. It had in addition certain shares in the Great Boulder East Extended to the nominal value of £20,000, which, however, were practically unsalable at the present moment. It had some Chaffers shares, numbering about 10,000, which at the present price were worth £1,750, and it had Hesperus shares to the nominal value of £6,500, which were unsalable at the present time. The Golden Horse Shoe shares had all been sold, and were represented in the cash balance referred to. The Eclipse Company possessed eighteen acres of land situated close to the Cressus properties at Hannan's. There was on the property what the Manager, Mr. Bowes Scott, described as a very strong lode, and there were two shafts sunk upon it. At the date of the last report which he had seen, the deepest shaft was down 180 feet. The stone during the last 30 feet that had been sunk had been gradually increasing in value, and at 180 ft. showed 12 to 15 dwts. in the panning. Mr. Scott's intention was to go down 200 ft. and then crosscut into the lode, and no doubt that gentleman fully anticipated that the stone at that point would be well worth crushing. The Eclipse Company had also a cash capital of between £6,000 and £7,000 left, and a complete crushing plant, now at Fremantle, ready to erect, which had cost £7,000, and had been paid for in full. The Hesperus Company had an acreage of forty-eight acres, situated close to the Bendigo mine. The reports made when that company was brought out stated that there was a very strong lode, twenty feet wide, at the bottom of the sixty feet shaft, and an entirely independent report, which was then made, confirmed the previous reports made by Mr. Bowes Scott and another expert. When the property was taken over, Mr. Bowes Scott commenced to work on the reef, which was twenty feet wide, but when they commenced to sink deeper than sixty feet they were flooded with water, and work had been practically at a standstill for the last four months, but winding plant had been sent out to enable them to get rid of the water. In addition to that property, the Hesperus Company had £2,500 in hand, and an unissued capital of nearly £20,000. With regard to the Great Boulder East extended, that property would be brought back for £1,126 more than it was originally sold for, but that £1,126 represented more than one year's development work upon the property. If the new company was formed, as suggested, a very considerable saving would be effected by having unity of management in one Board of Directors and one set of officers; the saving in directors' fees alone would amount to nearly £2,000 a year. It was intended that the new company should be managed by business men, and worked entirely in the interests of the shareholders, and with that object in view the articles provided that the first directors would only hold office until the statutory meeting, when the shareholders would appoint their own directors, and they could choose men in whom they could have full confidence.

After a long discussion the resolution was carried, and the meeting concluded with a vote of thanks to the Chairman.

## ECLIPSE GOLD MINING CO. LTD.

AN extraordinary general meeting of the shareholders in the Eclipse Gold Mining Co. Ltd. was held, on Monday, at Winchester House, Old Broad Street, E.C., Major-General Tweedie presiding.

The Secretary (Mr. ROBERT WARNER) read the notice convening the meeting.

The CHAIRMAN shortly stated the position of the Company, and explained the proposal which was now made to amalgamate it with some other companies owning properties in the neighbourhood, and then called upon the Solicitor to explain the contract and the details of the amalgamation scheme.

The SOLICITOR said the proposal was to amalgamate the Golden Link, the Great Boulder East Extended, the Eclipse, and the Hesperus Companies. As the shareholders doubtless knew, an amalgamation was carried out in one of two ways—either by the issue of further shares by one of the existing companies or by the formation of a new company to take over the assets of all the old companies. In this instance the latter course had been decided upon, and it was proposed to form the Golden Link Consolidated Gold Mines Limited, with a capital of £550,000, for the purpose of acquiring these properties. One incidental advantage that would be obtained by that process would be that the new company would have the name of the Golden Link, which was well known in the markets, its shares having at one time stood at 45s., if not 50s. The immediate result of the amalgamation would be that the new company would acquire 110 acres in the heart of the Hannan's district, upwards of £50,000 in cash, and £8,000 or £9,000 worth of machinery already in Australia. The total number of shares to be issued for the purchase of the four companies now in question was £269,000 odd, which compared favourably with the 316,410 shares forming the present issued capitals of these companies; so that the shareholders would see that an immediate reduction of £47,000 odd was made in the issued capital upon which dividends would be payable. He then proceeded to explain the agreement, going through its various clauses, and, with reference to the 17th clause, he pointed out that the time for completion—October 15—was now very near, and that the directors considered it would be advisable for the meeting to add a rider to the resolution, providing for the sale going through if any two of the companies concurred, whereby, if any delay arose with any of them, it would not necessarily invalidate the transaction, and cause the money expended on working out the scheme and carrying it through to be thrown away.

Mr. SCOTT-LINGS inquired what were the assets of the various companies to be taken over.

The SOLICITOR replied that the assets of this company consisted of between £6,000 and £7,000 in cash, a property of 18 acres, and a complete crushing plant now lying at Fremantle, which has been waiting there for the completion of the railway to Coolgardie in order that it might be sent up to the mine. The assets of the Golden Link Company consisted of £42,800 at the bank and certain shares in the Great Boulder East, the Hesperus, and the Chaffers Companies, in addition to 29 acres of property. With regard to the assets of the Hesperus Company, they consisted of 49 acres, which had been extremely well reported upon, and within the last fortnight an inquiry had come in from the adjoining owners to know whether the company would sell a portion of this land to them, the inference being that they had ascertained that their lode ran into it. This property was not only

well reported upon before the company was brought out, but another company, which was at that time considering its purchase, had an independent report made, which entirely confirmed the other reports. The Hesperus property, however, unlike most of the properties at Hannan's, was one in which a great deal of water was found, and the result had been that the shafts had been flooded, and the work had been practically at a standstill for the last three months. The managers had cabled over in May last for an engine and winding plant to get rid of the water, and it had been dispatched to them at once, and was now on its way to the mine for immediate erection. With regard to the Great Boulder East, as he did not act for that company he was unable to give full details; but he could say that the price to be paid for it, upon the figures represented to the promoters of the new company, was only some £1,126 more than the Golden Link Company had sold it for a year ago; so that that amount practically was all they were paying for the whole year's development work upon the property.

Mr. J. McDIARMIS moved that the meeting be adjourned for fourteen days in order that the shareholders might have time to consider the matter.

This was seconded by another gentleman present, but, on inquiry being made by the Chairman, it was ascertained that neither the mover nor the seconder of the amendment was a shareholder. After a little discussion, however, it was decided that the amendment should be put to the meeting, and that was done; but no one was found to support it except the proposer and seconder.

The CHAIRMAN then put the resolution: "That the provisional agreement, dated September 24, 1896, and made between this Company of the one part and William Cooper of the other part, and now submitted to this meeting, be, and the same is hereby, approved, ratified, and confirmed, except that Clause 17 thereof shall be read as if there were substituted for the word 'all' in both places where it occurs therein, the words 'any two of,' and as if the words 'including the sale and purchase thereby provided for' were added after the word 'purchases' in the last line but one thereof; and that the Memorandum and Articles of the new Company be approved, with the addition of the words 'or any two of them' after the word 'agreements' in the third line of Clause 3 of the Memorandum and in the first line of Article 3."

Lieut.-Colonel ELLIS seconded the resolution, and it was carried unanimously.

The meeting terminated with a vote of thanks to the Chairman.

## GREAT BOULDER EAST EXTENDED GOLD MINE LTD.

An extraordinary general meeting of the shareholders in the Great Boulder East Extended Gold Mine Ltd., was held on Monday, at the Cannon Street Hotel, under the presidency of Mr. Douglas A. Onslow, for the purpose of considering a proposed amalgamation with certain other gold mining companies owning properties in the Hannan's district, Western Australia.

The Secretary (Mr. W. Cooper) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—This being an extraordinary general meeting, we have to confine ourselves strictly to the business for which the meeting was summoned. It has been convened to submit to you an agreement which has been already entered into by the directors with Mr. Cooper, as trustee for a new company to be formed, with which it is proposed that this company and three other companies for the present shall be amalgamated. I will explain to you briefly the proposal, and then the solicitor will give you the principal heads of the agreement which it is proposed to confirm. The new company has been registered under the title of the Golden Link Consolidated Gold Mines Ltd., with a total capital of £550,000. The object of this company is to at present purchase the assets and undertakings of four existing companies, all in the Hannan's district and close to one another. The companies that it is proposed now to amalgamate are the Golden Link Gold Mining Company, the Eclipse Gold Mining Company, the Hesperus Gold Mining Company, and the Great Boulder East Extended Gold Mine Ltd. I may tell you that negotiations are in progress for taking in two other companies; but as they are not complete I am not permitted to mention the names of them. The capital has been made large enough for the purpose of taking in the two companies with whom negotiations are now pending. The terms upon which these four companies are to be acquired by the new company in the proposed amalgamation are as follows: The Golden Link, with a capital of £90,000 and an area of 29 acres, will receive for its issued shares £1 5s. per share, or a premium of  $\frac{1}{2}$ . The Eclipse, with a capital of £85,000, and an area of 18 acres, will receive par for its issued shares. The Hesperus, with a present capital of £100,000, and an area of 48 acres, will receive 15s. per share upon its issued shares. The Great Boulder East Extended—the company in which we are interested—with a nominal capital of £75,000 and an area of 15 acres, will receive 13s. 10d. per share on its issued shares. I may tell you there are 20,000 of our shares held by the Golden Link Company, and you will understand presently that they are not taken into account in the amount that will be issued for our company. The amount, therefore, which will now be issued for the new company for the purpose of acquiring these four companies which I have mentioned to you will be £270,000. They will have a total area of 110 acres. By the acquisition of these four companies the new company will have an actual present working capital in hard cash of between £50,000 and £60,000. I am unable to give you the exact figures, because I do not know them precisely, but the amount is between £50,000 and £60,000; that is to say, the capital they receive from the Golden Link, the Hesperus, the Eclipse, and ourselves. If the £270,000 be deducted from the total capital of £550,000 it will leave £280,000 of capital to take up the two companies to which I have already referred, and after paying for them on terms which have been proposed to them, and which I believe will be agreed to, a very large further sum will be left for additional working capital, the greater portion of which I have reason to believe—it was stated in this hall this morning—will be taken up at a small premium. In addition to the cash to be acquired by the new company, machinery to the value of about £10,000 will also be acquired, the whole of which, I believe, including one complete plant of krom rolls with cyanide plant, &c., being an equivalent of twenty stamps, is already in Australia, if not at present actually on one of the properties. I am not quite sure whether the whole of the plant has been actually delivered on the property. There is also a winding engine and condenser, which, I believe, are on one of the other properties. Besides, there are the developments which have been made on the various properties, and the reefs that have been so far discovered on them. Now, it will be seen from the foregoing, that the new company will be a substantial and a powerful one, and will be well supported by strong capitalists. The advantages claimed as resulting from the association of these companies are: (1) Economy in working expenses. That, I think, will be obvious to you. Instead of having four boards of directors there will be only one, and instead of having four managers and four separate establishments, there will be only one. It was stated at the Golden Link meeting this morning that the actual saving effected in the cost of administration will amount to something like £2,000, if not over £2,000, a year. (2) One powerful company with ample present working capital, and with a large further working capital in reserve and strongly supported. (3) The shares of which company will be held by strong and substantial holders, and they are more likely to command a good price on the market than those of the smaller individual companies. The fourth advantage is that they possess valuable properties and are well situated. Certain reflections were cast by one gentleman this morning on one of the companies to be acquired; but I think they were unwarranted. I do not propose to go into that, because, perhaps, it would be outside my province. I may tell you that if this amalgamation is effected it will cost our company nothing. I shall be quite prepared to answer any questions that bear upon this subject, and now I will conclude by proposing the following resolution: "That the provisional agreement, dated Sept. 24, 1896, and made between this company of the one part and William Cooper of the other part, and now submitted to this meeting be, and the same is hereby, approved, ratified and confirmed, and that the directors be, and they are hereby, authorised to carry the same into effect, with such modifications (if any) as they may deem desirable, except that Clause 17 thereof shall be read as if there were substituted



for the word 'all,' in both places where it occurs therein the words 'any two of,' and as if the words 'including the sale and purchases hereby provided for' were added after the word 'purchases' in the last line but one thereof, and that the Memorandum and Articles of the new company be approved, with the addition of the words 'or any two of them' after the word 'agreements' in the third line of paragraph 1 of Clause 3 of the memorandum and in the first line of the third article."

Mr. POMEROY seconded the resolution.

A SHAREHOLDER: I am a considerable shareholder in this company, and also in the Golden Link—a *bona fide* shareholder, I mean. Mr. Scott-Lings, at the meeting of the Golden Link Company this morning, said that it would be only the vendor's shares that would suffer by this arrangement. The Golden Link shareholders, he said, would take 11 shares in the new company, and the only shares that would suffer would be the vendors' shares. Is the 13s. 10d. per share that the shareholders in this company will receive an average of 13s. 10d. per share of the issued capital? The total purchase money that this company receives under the amalgamation, I understand, is £31,000.

The CHAIRMAN: Twenty thousand of our shares belong to the Golden Link Company, and being held by that company it will get nothing for them. Those shares are, in fact, part of the Golden Link Company's own assets. But the actual amount that the shareholders in the Boulder East Extended will receive is 13s. 10d. per share, not par.

Mr. CHESHIRE: Well, gentlemen, I think we need not take up any time in discussing this matter; it is evidently all cut and dried. You are taking over two worthless companies. The Eclipse Company and the Hesperus Company are both worthless. But it is no use arguing the question, the voting power is too strong for us. I am, myself, a holder of 1,000 shares; but I can see that it is no use to say anything. We may just as well shut up the meeting at once and go away.

The CHAIRMAN: I am sorry you take that view of the subject; but I do not think it is at all justified. The Eclipse and the Hesperus Company, so far as I am able to judge from what I have heard—I am not personally acquainted with either of them—possess properties more or less developed, and there is machinery on one of the properties. The object of erecting the machinery which is placed on one of these properties is to raise and crush the ore which has already been discovered on that property. I do not know, therefore, that we should be justified in admitting that either of those properties any more than our own, is worthless. The directors of this company have taken considerable care to go into the whole question, and from our present position, and from what we are able to see as to the advantages that will be derived from the amalgamation, we have come to the conclusion that it is a very desirable thing in the interests of this company.

Mr. MOYSEY: I am the holder of 500 shares in this company, and as such I strongly object to taking such a low value as 13s. 10d. per share. Might it not be possible to stand out for a better price?

The CHAIRMAN: There is one thing that I think you fail to see—it was explained this morning at a previous meeting in this room—and that is, that the amount to be received by each company in the amalgamation has been carefully calculated in proportion to its holding and the position it at present occupies. I am afraid that we should have some difficulty in getting par value for our shares in the market at the present time. I do not want to say anything disparaging to our property. I believe we have a good property, and that it is in an excellent position; but, unfortunately, the outside public does not think so, and we should have some difficulty in disposing of our shares now at anything like their par value. That has been taken into consideration, and, I think, wisely, in fixing the price to be given for the shares. If you consider that the Golden Link shareholders are parting with their shares at only  $\frac{1}{2}$  premium, and that they have a large cash consideration in addition to their valuable property, we certainly cannot consider that we are hardly dealt with in being offered 13s. 10d. per share. I am reminded that many of the shareholders present may not have been present at the other meeting this morning, and, though I am not anxious to go over the ground that was gone over at that meeting, I may tell you that it is almost certain that these shares which we acquire in the new company will go to a premium; in fact, as was stated by Mr. Scott-Lings this morning, he has already offered to take an option for the issue of a very considerable number of the new shares—I do not know what is the exact number—at a premium of 1s. 3d. per share. Of course, Mr. Scott-Lings cannot get anything out of those shares unless he sells them at a higher premium than 1s. 3d. per share, and that would put our shares beyond the 13s. 10d. per share very shortly. I think I may say that you will not be making a bad bargain in confirming the agreement that has already been entered into. The resolution was then put and carried, with one dissentient.

The SECRETARY: I may mention that there are proxies in front of me from a large number of shareholders who are not able to be present at the meeting, the total number being 39,797.

A vote of thanks to the Chairman concluded the meeting.

## HESPERUS GOLD MINING COMPANY, LIMITED.

An extraordinary general meeting of the shareholders in the Hesperus Gold Mining Company (Limited) was held at Winchester House, E.C., on Monday, for the purpose of considering a proposed amalgamation with certain other gold mining companies owning properties in the Hannan's district, Western Australia.—Major-General TWEDDIE presided.

The SECRETARY (Mr. H. R. Westall) read the notice convening the meeting.

The CHAIRMAN said: The question for you to-day is the consideration of the proposal to amalgamate a certain number of companies together. Arrangements have been made which I think you will consider render the amalgamation perfectly fair, and also beneficial to all parties concerned. I will ask you to allow me to allow our solicitor to read the agreements and explain them to you. He will do it better than I can.

The SOLICITOR said the proposal submitted to the meeting was one for the amalgamation of four companies (the Golden Link, the Great Boulder East, the Eclipse, and the Hesperus). The four companies all owned properties fairly close together at Hannan's, and together they had an acreage of 110 acres. When the amalgamation was carried out the new company would, therefore, acquire those 110 acres, in addition to which there was a sum of upwards of £50,000 in cash, and £8000 or £9000 worth of machinery, all that machinery being at present in Australia. The main idea of the amalgamation scheme was to effect economy, and it would be obvious that to have one board of directors, one set of officers, and one solicitor instead of four would secure economy in the working and management of the undertakings of the companies. The intention was that the business of the new company should be managed by the gentlemen in whom the shareholders could have every confidence, and in order to secure that the articles of the new company had provided a very unusual thing—namely, that the directors should only hold office until the statutory meeting, when they would present themselves to the meeting for confirmation in their office or the reverse. If the shareholders were satisfied that they were represented by a body of business men who were looking after their interests and the interests of the company, they would confirm them in their office, but if not, they would have the opportunity of appointing directors in whom they could feel confidence. With regard to the new company, its capital had been fixed at £530,000, which was a large capitalisation; but after the taking up of the four companies only £296,000 was required. A certain portion of the remainder would probably be issued within the course of some few months—certainly within the course of the year; and when that was done the new company would have a working capital of upwards of £120,000. The balance of the capital of the new company had been provided with a view to taking in certain further companies, with whom negotiations would be opened by the new company as soon as it was formed. It was obvious that in the present state of matters it was not advisable for him to mention what those companies were, because it might lead them to ask for larger payments than the new company might think wise to give them. At the same time, the directors of the new company would take good care to select companies and properties which were likely to conduce to the benefit of the shareholders of this company. He

did not think he need say anything more with regard to the scheme as a whole. The contract was in the ordinary form for the sale of the undertaking to the new company. It provided for the formation of the new company, and for the new company adopting this contract, if the shareholders present approved of it. The new company had to take over and buy the whole undertaking of the Hesperus Company on September 30 as a going concern, but the Hesperus Company would carry on its business in trust for the new company until the actual transfer of the property. The consideration to be paid was partly the undertaking of those liabilities; and, secondly, the Hesperus Company would wind up, as, of course, it would have to do when its assets consisted of nothing but shares in the new company, and Mr. Warner was appointed liquidator. The new company would pay the whole cost of winding up. Further, the new company would pay three months' fees to the directors who did not become directors of the new company. That, he thought, was a fair proposal. The directors effaced themselves for the shareholders' benefit. The new company would allot to the Hesperus Company at the rate of 13s. 4d. for each share. The Golden Link Company were not to be taken into account in fixing the number of shares to be allotted. That was obviously a benefit, because it was by that that the issued capital of the new company was very much less. With regard to the rate of 13s. 4d., it was considered that it would fall very unfairly upon those persons who had subscribed for shares in the Hesperus Company if they had to take two shares for three existing shares. A cordially, the vendor had written a letter to the secretary to the effect that he and his friends agreed to bear the whole rebate which would otherwise fall upon the subscribed shares, and they would distribute among themselves the proportion of the rebate which would otherwise fall upon the subscribed shares. He thought that was a very liberal proposal on the part of the vendor, and one that would be very satisfactory to the shareholders. There was also a provision with regard to shares not yet fully paid up, that if within six calendar months the purchase was not completed the liquidator might regard those shares as surrendered, so that the shareholders who did not pay up would lose their shares. The sales were to take effect from September 30. The certificates were deposited in the bank in the joint names of the Chairman, pending the actual transfer in Australia and England. The new company would cause the agreement to be filed at Somerset House. If the proposals were not completed by October 12, the company would be at liberty to carry them out, but could not be compelled to do so. The board had considered the proposals, and thought it desirable that a rider should be added to the resolution, and it had already been passed by the Golden Link, the Great Boulder East, and the Eclipse Companies. In the first and last cases the decisions were unanimous, and at the Great Boulder meeting there was only one dissentient. The effect of the rider was that if any two purchases were completed by October 15 the matter could proceed, and the expense of bringing it up to this point would be the same as if the clause remained exactly as it was drawn. The whole contract was perfectly straightforward. It was in identically the same terms as those already approved by the three other companies, with the exception that in this case there were partly-paid shares, and there was also a clause as to the Hesperus shares held by the Golden Link not being taken into account.

The CHAIRMAN then proposed the resolution: "That the provisional agreement, dated September 24, and made between this company of the one part and William Cooper of the other part, and now submitted to this meeting, be, and the same is hereby approved, ratified, and confirmed, with the rider as in the case of the Eclipse Company."

Mr. PATULLO seconded the motion, which was unanimously carried.

A vote of thanks to the Chairman terminated the meeting.

## LAKE VIEW EAST GOLD MINE, LIMITED.

The statutory meeting of the shareholders in the Lake View East Gold Mine (Limited) was held on Tuesday, at the Cannon-street Hotel, when Colonel R. PARRY NISBET (the Chairman of the company) presided.

The SECRETARY (Mr. H. Milner Willis) read the notice calling the meeting.

The CHAIRMAN said: Gentlemen—This is, as you are aware, merely the statutory general meeting of the company, which the law requires shall be held within four months of the formation, and I have no resolution to propose in concluding the remarks I now venture to offer you. The directors have great satisfaction in meeting you to-day, as they wish that the shareholders should be equally well acquainted with everything regarding their property as they are themselves. This company, you are aware, was formed to acquire and work lease No. 947e, comprising an area of 24 acres, and was originally one of the leases acquired by the Hannan's Proprietary Development Company. Our property has, as its immediate neighbours, the Lake View, Lake View South, Lake View Extended, and Central Boulder leases, and I think we are in very good company, as the reports which have been received from those mines show that they are developing in a most satisfactory manner. I hope we may be quite easy with regard to several important considerations necessary to the successful working of our own property. First, as regards water, our property will be very much enhanced in value, and secure at most moderate and beneficial rates a very sufficient supply of this commodity from the Hannan's Water and Ore Reduction Company, which is shortly being brought out by the Hannan's Proprietary Company, and will, it is hoped, be in working order and ready to deliver all the water we require as soon as we can make use of it. Our manager, Mr. George Gray, who is well known as a man of great ability and resource, and one in whom we all place the utmost confidence, informs us that timber at the Lake View East is plentiful, and that there is a fine mill site, so with water, timber, and a good position for our machinery, the prospect appears a very encouraging one. This company was registered on June 8 with a capital of £120,000, of which £60,000 are issued to the vendors in part payment of the purchase money, and £10,000 were reserved for future issue, the issued working capital being £30,000. The flotation was, in every respect, most satisfactory; not a penny was spent in underwriting, for the capital was applied for by our own shareholders in the issuing companies and the public several times over. Our manager, Mr. George Gray, with his usual energy has lost no time in pushing forward the developments of this property. I need not trouble you with reports which have already appeared in the papers, but I will read you the last, which is contained in a letter, dated August 7:—"Re Lake View East Mining Company. You will be pleased to know that this mine is opening up very well indeed. From our No. 2 shaft, when I was down the other day, the crosscut was just entering the lode, from the surface of which I took samples which gave by fire assay 8 ounces. From the 18 inches then opened on the hanging wall of the lode in the crosscut I took three samples, which gave me by fire assay 5 ounces prospect. This is very gratifying, but, of course, I do not expect that the lode when opened will average anything like this. I shall be perfectly content if it opens and goes as well as the Lake View South. This particular part of the belt is fraught with great possibilities. There are two distinct lode formations in this ground, which have proven a little to the north and east to be exceedingly rich and continuous. A month from now, when both our crosscuts are in, they will prove this one lode for a distance of 300 feet. I hope to be able to give you some very cheering and encouraging reports. I have ordered some hoisting works for this mine, which will be erected as speedily as possible." The only other late report is a cable, which has only just been received from Mr. George Gray, dated Kalgoorlie, September 26, which is as follows:—"The value of the Lake View East has been enhanced by the recent discovery of a fine lode, carrying gold milling ore on the Lake View Extended, striking through the heart of Lake View East. We are now sinking on the course of this lode, which is likely to be a valuable addition to other auriferous formations in

this lease. In No. 1 shaft at the 96 feet level, where a strong lode carrying gold was struck, a crosscut has been driven west for 50 feet. No. 2 shaft has been sunk 117 feet; a crosscut has been driven east 40 feet. The lode has been driven on the north 51 feet, and 40 feet on the south, and carries gold the entire length. We are now preparing for the erection of the hoisting and pumping plant, and until the mine is fairly equipped we are reducing expenses consistent with good economical working. The ground in the workings is of opinion that the mine will respond well to the development." Now coming from a gentleman and expert of Mr. George Gray's position and character, I think this latest report on our property is one that should be deemed highly satisfactory. I do not think I need trouble you on your time and patience to day at any greater length. Your directors have received with pleasure the report made to them by our valued managing director, Mr. Herbert Moir, who very recently returned from Western Australia, where he made a personal inspection of this property, the result of which, before we separate, I shall ask him to repeat to this meeting. There is only one other thing, I think, I have omitted to mention—namely, that a settlement in the shares of this company at 15s. paid has been granted by the Stock Exchange committee as from the 14th inst. I hope, however, none of the shareholders in the Lake View East will think of parting with their shares except at a fair premium. If anyone suggests to you to do otherwise, I think you may safely declare your indifference as to what the price of the shares may be as long as you have confidence that the property is itself all right, and that the bottom has not fallen out of the mine, or anything untoward occurred. Gentlemen, I thank you very much on behalf of the board for your kind attendance here to-day, and I can only assure you that the directors will continue to spare no efforts in your best interests, and will use every endeavour to justify your entire confidence. If, after Mr. Moir has spoken, any gentleman has any question to ask, I shall be pleased to answer it to the best of my ability. (Applause.)

Mr. HERBERT MOIR: I should like to add a few words to what Colonel Nisbet has said in regard to the position of the Lake View East. When I stayed at Hannan's Camp I visited the property, and went down the shafts which were sunk. The results of the assays, which were made were brought into the camp whilst I was there, and there was not one of them which was lower than 8 ounces to the ton. I saw the results myself, and we were shown the assays before anybody else had seen them, and I know they were absolutely accurate. Most of you know that the lodes at Hannan's Camp run almost due north and south, and not very long ago, on the block called the Australia East, which belongs to the Associated Gold Mines, on their eastern boundary they made an important discovery. A lode was struck there which went over 12 ounces to the ton, and I believe some of the assays were even higher. If you look on the map you will see that the Lake View East is exactly on the strike of the lode which was discovered on the Australia East. It must go right through the centre of our property, and that is confirmed by Mr. Gray's cable with regard to the Lake View Extended, the Lake View East being its southern neighbour. On the north-west boundary of the Lake View East we touch the big Lake View Mine. I hold a large number of shares in our own company, and as Colonel Nisbet has said, I would ask the shareholders not to be frightened by the almost general collapse in West Australian shares which has taken place recently, because I believe if you hold your shares until the depression has passed away you will see them at a very much higher price than they are to-day. As the Chairman has said, the working capital has been fully subscribed, and it will be well taken care of. Every penny of the money will be spent on the developments of the mine itself, with the exception, of course, of the small London expenses. Gentlemen, I thank you for your kind attention to what I have had to say; and I would like to add that the board, as a whole, have a very large interest in the shares of this company. (Applause.)

Mr. RICHARD DAVIES proposed a vote of thanks to the Chairman and directors for their services to the company.

Mr. H. STEWART seconded the resolution, which was carried unanimously.

The CHAIRMAN: Mr. Davies—On my own behalf, and especially on behalf of my co-directors, I beg to thank this meeting for the vote, and to assure the shareholders that the board will leave no stone unturned to make the property successful, and to husband the resources which have been placed in our hands. (Applause.) This concluded the meeting.

## ANGLO-WESTRALIAN DEVELOPMENT SYNDICATE (LIMITED).

The first annual general meeting of the shareholders in the Anglo-Westralian Development Syndicate (Limited) was held on Tuesday at Cannon-street Hotel, Mr. H. Stanhope, who presided, said they had succeeded admirably during the 13 months so far as the small capital placed at their disposal would allow. With regard to the future prospects, he explained that amongst their properties was the Bass and Flinders Mine, which they had every reason to hope would prove a very valuable concern. They had also another property, which it was intended to keep in their own hands. In these two respects they had achieved a great success, but in the matter of the timber concessions they had been a little too sanguine. Through the pressure exerted, however, the syndicate has recouped in a large degree the losses which appeared on the original account. Mr. Freeman, managing director, spoke in highly enthusiastic terms of the Bass and Flinders Mine. He anticipated that in the future they would be able to pay the shareholders a dividend equal to the amount they had paid out.—The resolution for the adoption of the report was carried unanimously.

## STANDARD BANK OF SOUTH AFRICA (LIMITED).

The ordinary general meeting of the shareholders in the Standard Bank of South Africa (Limited) was held at the Cannon-street Hotel, on Tuesday, when Sir W. C. F. Robinson, who presided, in moving the adoption of the report (showing a profit during the six months ending June of £113,301, out of which a dividend of 2½ per share was recommended, with a bonus of 15s. per share, carrying to reserve fund £20,000, and taking forward £13,301), referred to the various events which had occurred in South Africa during the period under review. The output of gold for the month of July was over 203,000 ounces, the highest up to that period of any similar return. The exceptional circumstances were of an uncommon character; they had suffered from abnormally cheap money, but they hoped to employ what they had in a legitimate way soon. They paid 2½ per cent. for money deposited from one to three years, and several years had elapsed since the bank had to avail themselves of the surplus which they had. The commercial development of South Africa was certain in the future. Referring again to the gold mining industry, he might mention that during the month of August the country had raised 212,429 ounces of gold. This was greater than any preceding month within five years. In August, 1892, the output was 103,322 ounces; in August, 1893, 198,063; in August, 1894, 174,977 ounces; and in August, 1895, the return was 203,875. The imports into Cape Colony showed a very large increase, and they had hopes that a further accession of trade would arise from coal operations in the future. They had granted to their employees, now 800 in number, an addition of 10 per cent. to their salaries. (Applause.) He had much pleasure in congratulating those present upon the admirable position which they held, notwithstanding the adverse circumstances against which they had had to contend.—Sir H. Barkly seconded the motion, which was agreed to.

## STAR OF THE EAST GOLD MINING COMPANY (LIMITED).

The first annual general meeting of the shareholders in the Star of the East Gold Mining Company (Limited) was held on Tuesday, at Winchester House, E.C., when Major-General J. Shaw Stewart, who presided, in moving the adoption of the report and accounts, said, unfortunately, the hope held out when the company was formed that they would be able to pay dividends from the start had not been realised. In the opinion of the directors, this would have been the case had the mine been so developed as to keep the battery continually cranking. However, a great deal of delay had been caused in de-



relating the mine in consequence of the order for the pumping machinery not having been executed until a long period after it was given out. The result of this was that the working capital of the company had been exhausted, and £5000 had been borrowed on mortgage. But even this amount the directors anticipated would not be sufficient to tide them over their difficulties. In regard to the prospects of the property these were considered to be very gratifying.—Mr. J. Berry White seconded the resolution, which, after considerable discussion, was carried with one or two dissentients.

**WHITE ROCK SILVER MINE (LIMITED).**  
The statutory meeting of the shareholders in the White Rock Silver Mine (Limited) was held at Winchester House, E.C., on Monday, Mr. W. Kewick presiding.—The Chairman said the subscription list closed on June 29, and the allotment was made the day after. The shares were considerably over-applied for, and consequently the whole of the 50,000 cumulative preference shares were allotted. The vendors received in payment for the property 100 £1 shares and 25,000 cumulative preference shares, thus making the share capital £175,000. There was every reason to believe that the £50,000 subscribed capital would amply suffice for all requirements. The property originally consisted of 140 acres, but the general manager, Mr. Howell, while stripping off the debris on the western side of the property, found the ore was improving, and he took up a further 40 acres, while an additional site had been taken at Plumbago Creek to secure their water rights. From latest advices the old machinery was being utilised in the best possible manner, and the ore looked very promising. Two samples had been taken from the shaft, and showed the satisfactory average of 90 ounces and 61 ounces respectively. In regard to the treatment of the ore, they had entered into a contract with the Smelting Company of Australia. Development was being carried on satisfactorily, but he was unable to say when crushing returns would be received.

**PALMAREJO MINING COMPANY (LIMITED).**  
The adjourned ordinary general meeting of the shareholders in the Palmarejo Mining Company (Limited) was held at the Institute of Chartered Accountants, Moorgate-place, E.C., on Monday, when Mr. T. Southcott, who presided, in moving the adoption of the report, said one of the most gratifying features of the profit and loss account was that the debit balance at the end of the year was considerably smaller than it had ever been before. The total debit balance was £173,042, or nearly one-half their ordinary and preference share capital. The company had been offered the Harappa Mine, which adjoined the Palmarejo property, and the directors failed to see how they could disregard the favourable report of the mining engineer upon them. The proposed terms, which the board felt no hesitation in recommending the meeting to accept, would mean a cash payment of £25,000, which was to come out of the profits of working the mine, and was to be made in eight annual instalments. The remainder of the purchase price was to be £100,000 in unified shares. With regard to the Palmarejo Mine, he could not deny, so far as high grade ore was concerned, that it had proved disappointing, inasmuch as they had found very little ore in excess of 30 per ton. He had, however, still faith in it, and believed that when it was properly developed, they would yet see a good profit from it. In the meantime, it was of great importance that they should have richer ore to work upon to enable them to meet their heavy annual charges, and in the adjoining property they proposed to acquire they would get a grade of ore much higher, and, so far as the reports were concerned, it would be a most desirable acquisition.—Mr. T. Eley Sykes seconded the motion, and considerable discussion followed with regard to the conditions upon which the new property should be acquired.—The resolution for the adoption of the report was ultimately put and carried, with the addition that no directors of the Gold Fields Company of Mexico be eligible for a seat on the board of the Palmarejo Company.—Subsequently an extraordinary meeting of the shareholders, and a special meeting of the preference shareholders were held, when resolutions making certain alterations in the constitution of the capital of the company were passed.—A vote of thanks to the Chairman concluded the proceedings.

**MELBOURNE DEMOCRAT GOLD MINES (LIMITED).**  
The statutory meeting of the shareholders in the Melbourne Democrat Gold Mines (Limited) was held on Wednesday, at Winchester House, E.C., when Col. L. Anstruther, who presided, said the capital of the company was £100,000, of which £15,000 was set aside for working capital. The property, which was within 24 hours of Melbourne, consisted of the Democrat, Balance, and Republic leases, and comprised a total area of 83 acres. On the first lease the Democrat lode was being developed by means of three tunnels. In No. 1 tunnel the reef was 7 inches wide for 440 feet, and in No. 2 500 feet had been driven on the lode, which averaged 10 inches in width. A crushing of 776 tons from this tunnel made by the Australian company, the vendors of the property, yielded 3817 ounces of gold. The No. 3 tunnel, they were informed by cable, had cut the lode at a depth of 565 feet. Its width was 4 inches, and it was estimated to be worth 5 ounces a ton. In regard to the question of machinery, the Livingstone battery, which had been erected a short distance from the property, had been purchased.—A vote of thanks to the Chairman concluded the meeting.

**BRADBURY'S DRILL SHARPENER COMPANY (LIMITED).**  
The adjourned meeting of the shareholders in this company was held on Thursday, at the Guildhall Tavern, Gresham-street, E.C., Mr. Newman Marks presiding.—Mr. J. B. Knight, secretary to the investigation committee, read the committee's report, in which it was stated that the dissatisfaction expressed at the last meeting was fully warranted by the state of affairs which was disclosed in the course of their investigations. The company was formed twelve months ago in Johannesburg to take over all the patent rights of the old company in return for 40,000 shares, 15,000 shares were held in reserve, and 15,000 shares were allotted to Mr. Bush in consideration for his finding £5000 working capital, which is all the company started with. The report then proceeded to cast certain reflections upon the management, and ended with suggestions to the effect that the present board should be replaced by a new one, that the board at Johannesburg should be abolished, and that the offices of the company should be removed.—The Chairman, in replying to the report, first complained of a want of courtesy on the part of the committee in not furnishing copies of the *ex parte* statement which had just been read to the directors. He declared that the report showed an absolute partiality throughout and stated that a good many of the points raised had been successfully explained to the committee.—Eventually, after considerable discussion, a poll was taken on the question of the composition of the board, which it was agreed should cover the other questions at issue. The results were declared as follows: For the nominations of Mr. Backhouse, 16,464; for the nominations of Mr. Barnett, 24,488.—The Chairman thereupon declared Messrs. Bradbury, Paterson, Marks, Hall, and Marshall duly elected as the new board. He intimated that the board would prepare a statement of accounts made up to date, and call a general meeting at the end of the year, when the whole position would be placed before the shareholders.

**CAMDEN EXPLORATION COMPANY (LIMITED).**  
The statutory meeting of the shareholders in the Camden Exploration Company (Limited) took place on Thursday, at Winchester House, E.C., when the Chairman (Mr. W. A. Harper) stated the company was formed to take over the assets of the Camden Syndicate. Mr. John Howell, their consulting engineer, had reported very favourably on their prospects, he having secured for them two large gold mines in New South Wales. There were exceptional facilities for working the mine, from adit levels, in the most economical manner. They were also advised that the lodes were highly profitable, and varied in width from 16 feet to 20 feet. In Mr. Howell's opinion there was an immense quantity of ore to be extracted above the adit levels. At present the directors had not decided whether they would work the two mines themselves or to form a separate company to take over one of them.

#### OLD BROAD STREET SYNDICATE (LIMITED).

The statutory meeting of the shareholders in the Old Broad Street Syndicate (Limited) was held on Thursday, at Winchester House, E.C., when Mr. W. M. Farmer, who presided, said the first issue of £10,000 was readily taken up. The first property they sought to acquire was Lindsay's Extended, but on a report being made to them by Mr. Archbold, who examined it, the directors were not satisfied with the prospects, and after getting the opinion of Mr. Archbold confirmed, they decided to abandon the mine. However, they hoped shareholders would lose none of their money in consequence, as they were bringing an action against the vendors for the return of the amount parted with on the ground of alleged misrepresentation. Since Mr. Archbold had secured for them another property, the Cornstalk group, which was situated in the Ulling district, and from the reports received they had every reason for believing that it would prove a valuable one. When sufficiently developed the mine would be floated as a separate company, and the directors hoped that the shareholders would then secure a very substantial profit.

#### VALE OF COOLGARDIE GOLD MINES (LIMITED).

The statutory meeting of the shareholders in the Vale of Coolgardie Gold Mines (Limited) was held on Thursday, at the Cannon-street Hotel, under the presidency of Major F. J. Ricarde-Seaver.—The Chairman said the nominal capital of the company was £90,000, £30,000 of which formed the working capital. The vendors showed their confidence in the property by accepting shares to the extent of £60,000 in payment. The company had been most fortunate in securing the valuable services of Dr. Simon, President of the Coolgardie Chamber of Mines, as its resident managing director. Pending the arrival and erection of the plant selected, he had been enabled to make arrangements for crushing on a small scale, more as a test than otherwise, such samples of ore as he might deem expedient to extract. The property was situated in the Coolgardie gold fields, 7 miles north of the town of Coolgardie itself, and consisted of two mining leases, comprising between them 30 acres, in addition to which they had a water right area covering five acres. Regarding timber and fuel, the directors were assured that extensive eucalyptus forests surrounded the mine, which were capable of supplying their wants. They were also assured that an ample supply of water for milling requirements would be forthcoming. A shaft had been sunk on the quarry reef, and the ore exposed was very promising, portions of it being densely impregnated with visible gold. In a cable dated October 1, Dr. Simon stated that at the 70 feet level the reef showed visible gold, and at the 200 feet level a well defined and compact reef between the walls. In addition to the Quarry reef they had the main reef, which, at the depths attained, was reported to be still strong, and yielding good payable ore. Mr. P. Ballard, a mining engineer of repute at Coolgardie, estimated at the end of March last that on the main reef there were 9000 tons of ore developed and ready for stopping. As regarded promise of permanency and richness, the main reef, in his opinion, deserved to be ranked among the first in Western Australia.—A vote of thanks to the Chairman concluded the proceedings.

#### COOLGARDIE GOLD SYNDICATE (LIMITED).

An extraordinary general meeting of the shareholders in the Coolgardie Gold Syndicate (Limited) was held at the Great Eastern Hotel, Liverpool-street, E.C., yesterday, when the subjoined resolution, which was passed at the extraordinary general meeting of the company held on September 22, was submitted for confirmation:—"That each of the existing 10s. shares of the company be divided into two shares of 5s. each, and so that as regards those shares which are not fully paid up, the proportion between the amount which is paid and the amount which is unpaid on each share of reduced amount shall be the same as it was in the case of the existing share from which the shares of reduced amount are derived."—The Chairman, in moving the confirmation of the resolution, said he was pleased to say that Mr. Sherlaw had written the directors, stating that he had 5 feet of water at the bottom of the shaft, and considered that the quantity would considerably increase as the sinking proceeded. This was very encouraging news in view of the fact that the water company was charging 12s. and 13s. per 1000 gallons. As showing the feeling of the shareholders in regard to the resolution, he mentioned that the directors had received 66,388 votes by proxy, or nearly 14,000 more than they received at the previous meeting.—Mr. J. A. Travers seconded the motion, and it was agreed to.—Replying to the usual vote of thanks, the Chairman said on October 24 they would receive a dividend of 25 per cent.—The meeting then terminated.

Mr. GEORGE BEETHAM has accepted a seat on the board of the Taitapu Gold Estates (Limited) rendered vacant by the death of Colonel G. C. Thomson. Mr. Beetham sails for New Zealand in the course of a few days, and will visit the Estate on behalf of the company.

**THE DEEP LEVELS OF THE RAND.**—Our eminent contemporary the *Standard and Diggers News*, has just published as a supplement a coloured central section of the Witwatersrand gold fields showing the deep levels. The work is admirably executed, and should meet with general and immediate favour.

## DIARY.

Saturday, October 10.

North of England Inst. of Mg. and Mech. Engrs., Newcastle, 2.

Monday, October 12.

Lady Loch Gold Mining, Winchester House, 12.

Forest King Gold Mine, Winchester House, 12.

Hauraki South, Winchester House, 2.30.

Elmore's French Patent Copper Depositor, Win. House, 2.30.

Wemmer, Johannesburg.

Tuesday, October 13.

Murchison New Chum, Cannon Street Hotel, 2.

Ile of Man Mining, Chester, 2.30.

Langlaagte Royal, Johannesburg.

Wednesday, October 14.

Leadhills Silver Lead Mining and Smelting, Finsbury Ho., 12.

West Kitty, 37, Walbrook, E.C., 12.

Montana Mining, Winchester House, 12.

Great Laxey, St. James's Hall, Douglas, 12.

North Laxey and Glencherry, St. James's Hall, Douglas, 12.30.

Westralia, Winchester House, 2.

Appantoo Gold Mining, Winchester House, 2.

London and Orange Free State Exploration, Kimberley, 11.

Nourse Deep, Johannesburg.

Thursday, October 15.

Sierra Buttes Gold Mining, Cannon Street Hotel, 12.

Plumas Eureka, Cannon Street Hotel, 12.

African Gold Recovery, Cannon Street Hotel, 12.

Blackett's Gold Mines, Winchester House, 12.

Almaraz Tin Mining and Smelting, Winchester House, 12.

Linares, 6, Queen-street-place, 1.

Fortuna, 6, Queen-street-place, 1.30.

Alamillos, 6, Queen-street-place, 1.45.

Nepean Gold Mines, Cannon Street Hotel, 2.

Gallymont Gold Fields, Cannon Street Hotel, 2.30.

Friday, October 16.

Violet Consolidated, Winchester House, 12.

Caratol, Winchester House, 12.

McCulloch, Coolgardie, Cannon Street Hotel, 1.30.

Exploration Company, Cannon Street Hotel, 2.30.

Institution of Junior Engineers, Westminster Palace Hotel, 8.

The SUBSCRIPTION LIST will be CLOSED on TUESDAY, 13th October, for TOWN, and on WEDNESDAY for COUNTRY Applications.

This Prospectus is issued by the Mines Contract Company, Limited, who guarantee the Working Capital.

## PEABODY AND BERKSHIRE GOLD MINES, LIMITED.

WANDILIGONG, VICTORIA, AUSTRALIA.

Incorporated under the Companies Acts, 1862 to 1890.

CAPITAL ... .. £100,000.

In 100,000 Shares of £1 each.

NOW OFFERED FOR SUBSCRIPTION, 40,000 SHARES.  
Payable: 2s. 6d. on Application; 2s. 6d. on Allotment; the balance in Calls not exceeding 5s. per Share, and at intervals of not less than two months.

5000 SHARES TO BE HELD IN RESERVE.

#### DIRECTORS.

Dr. ROBERT FARQUHARSON, M.P., Director of Bovril, Limited.

Sir WALTER OLIVEY, K.C.B.

J. H. BORRER, Esq., J.P., Director of Hannan's Sir John Forrest Gold Mines, Limited.

CHARLES SIDEX, Esq., Director of Mount Usher Gold Mine, Limited.

Major J. F. HOUSTOUN, of Clerkington, Haddingtonshire.

#### BANKERS.

THE NATIONAL PROVINCIAL BANK OF ENGLAND

(LIMITED), Bishopsgate Street, London, E.C., and Branches.

#### SOLICITORS.

Messrs. SHEFFIELD, SON, and POWELL, 23, St. Swithin's Lane, London, E.C.

#### BROKERS.

Messrs. R. E. TOMKINSON and Co., 74, Cornhill, London, E.C.

#### AUDITORS.

Messrs. PARKINSON, MATHER, and SMITH, Chartered Accountants, 22, Great Winchester Street, London, E.C.; and at 8, King Street, Manchester.

#### SECRETARY AND OFFICES.

Mr. FRANK FULLER, Tower Chambers, Finsbury Pavement, London, E.C.

#### ABRIDGED PROSPECTUS.

This Company has been formed to acquire and work two Gold Mining properties, the one known as "Peabody," having an extent of about 50 acres, and the other the northern half of "Berkshire," about 15 acres, adjoining, with all Rights, Claims, Mill Site, and Water Rights.

The properties are advantageously situated, being within about 2½ miles of a Railway Station; and 200 miles from Melbourne, and according to the Reports there is an ample supply of water and timber for all milling and mining operations.

The Mines have been worked in a primitive way, but with the Capital now to be provided a Mill can be erected, and a low level tunnel driven, which will intersect all the reefs about 150 ft. below the present workings, and do away with the sleighing and cartage of the ore to the Custom Mill, which is now necessary.

The "Peabody" Mine has been thoroughly well proved, having been worked on a small scale since 1861. For ten years, up to November, 1893, it was in the hands of two working miners, Messrs. Peter and Thomas Robertson (father and son). During the time they were the owners, they took out gold to the value of over £10,000. Six Reefs have already been cut, and partially worked upon, the following being returns from some small crushings of ore, made by Messrs. Robertson:—

674 tons yielded 1414 ounces gold.

Some of the ore milled 4½ ounces gold per ton.

Since 1893 a considerable amount of work has been done, a tunnel having been driven 637 feet, which has cut the reefs worked in the upper levels. In the course of development small quantities of ore have been collected, and nine crushings made, in all about 445 tons, which yielded 726 ounces of gold, and realised over £4 per ounce, the last crushing showing about 2 ounces to the ton.

Work has only been done on a very small part of the company's property. The northern portion has not yet been touched, with the exception of slight surface workings.

It is believed that the reefs already found on the "Peabody" will run into the "Berkshire," which gives the properties an additional value, especially as they can be conveniently worked together. The new tunnel can be made in such a way that the mines will be drained, and the trucks run direct to the mill site, where it is proposed to erect a battery. All crushings in the past have been at a Custom's Mill, and the late owners are of opinion that a considerable percentage of the gold has been lost in treatment. The district is noted for the large output of gold in the past. The "Oriental" Claim, which is situated next to the Southern half of the "Berkshire," is said to have contained a reef 30 to 40 ft. wide, and produced gold to the value of £750,000, to a depth of 200 ft. This line of reef enters the "Berkshire" property, and some of the ore taken has yielded as high as 5 oz. of gold per ton.

Mr. J. Macdonald Cameron, F.G.S., F.C.S., formerly Member of Parliament for the Northern Barches, and now Deputy Master, Sydney Branch of the Royal Mint, has made a most exhaustive report.

The Properties have also been reported upon by Mr. T. G. Davey, F.G.S., &c., Mr. R. H. Rowe, Mining Engineer, and Mr. H. P. Richards, Mine Manager. Extracts from these reports are contained in the full Prospectus.

Mr. R. H. Rowe, Mining Engineer, says in his report:—"I have been connected with quartz mining in the Australian Colonies over 40 years and since 1871 have been a mining manager. The opinion I have given on the 'Peabody' is not a scientific one, but that of a practical miner who is well acquainted with the characteristics of the quartz reefs in this district, having been mining here many years, and in my opinion the Peabody Mine will prove to be one of the best mining properties in this proverbially mining centre, and have very great pleasure in recommending it to investors."

The Reports have been made for the Peabody Gold Mining Corporation Limited, the former owners of the "Peabody" portion of the property, and the statements herein are based upon the said reports.

The purchase price of the properties has been fixed at £25,000, payable as to £55,000 in fully paid-up Shares of the Company, and the balance in cash or shares at the option of the Directors, leaving available 15,000 Shares to provide working capital, of which 10,000 Shares will now be issued and 5000 Shares held in reserve, as recommended in the reports.

The Mines Contract Company, Limited, are the Vendors and the Promoters of the Company, and will pay all expenses of and incidental to the formation of the Company up to and including the first general Allotment.

For particulars of Contracts, &c., see full Prospectus.

The Agreement and Memorandum and Articles of Association can be inspected at the offices of the Solicitors of the Company, and the reports, maps, plans, &c., may be seen on application at the offices of the company.

Prospectuses and Forms of Application may be obtained from the Bankers and Solicitors, and of the Secretary, at the offices of the Company.

#### THE CHAMPION REEF GOLD MINING COMPANY OF INDIA

(LIMITED) have sold the gold produced in August for £26,665 8s.

The London agents of the RANDFONTEIN ESTATES GOLD MINING COMPANY, WITWATERSRAND (LIMITED), notify that certificates for the bonus shares of Porgos Randfontein Gold Mining Company (Limited) are now ready for delivery, in exchange for the forms of receipt which have been posted to registered shareholders.



## PARIS LETTER.

State of the Mining Market.—English bears and French investors.—Outlook for South African shares.—Mining enterprise abroad.

(FROM OUR OWN CORRESPONDENT.)

THE Paris mining market is beginning to show evidence of an innate weakness that was until lately only suspected to exist. Shareholders have been "sitting" on their South African mines with wonderful pertinacity for many months past with the conviction that the expected revival must come at some time or another. They had learned from the experience of the slump of last autumn that it was extremely unwise to realise their holdings at the instigation of the professional bears, and that if they could only weather the period of low prices they would be compensated before long by larger profits. Speculators likewise displayed the greatest confidence in the early future of the market, and a few weeks back showed themselves willing to take up shares at the values then ruling. It was fully expected that the South African market was on the eve of a general upward movement, and if more buying was not then indulged in it was only because speculators preferred to wait a little longer, in order to seize the psychological moment when they would be able to secure the largest margin of profit. Thus the dissatisfaction now being expressed as to the state of the market is all the keener because the confidence of a few weeks back was believed to be so well placed, and the sudden drop from hope to despair, at the time when speculators believed themselves at length on the way to make a fortune, has left a great many people so disappointed that they are only awaiting a favourable opportunity to clear out of South African mines with the least possible loss. The fact, too, that shareholders are naturally inclined to institute a comparison between the position of the mining market at the present time, and what it was exactly a twelvemonth ago, is not altogether in favour of mining shares. The slump of last autumn is in reality being repeated, though on a smaller scale, at the present moment, and looking back on the past year speculators and investors find that the situation has in no way improved, that it has indeed gone from bad to worse. It was expected in some quarters that the visit of the Tsar to Paris would have some effect in firming up mining shares by creating confidence among the investing public in the political outlook, but it is evident that political matters have extremely little to do with South African mines, whatever influence it may exert upon finance generally. If anything, the Imperial visit has merely served to still further accentuate the depression by keeping people away from the mining market; and this week there have probably been fewer transactions than at any similar period during the year.

Yet a closer investigation into the situation of mining shares makes it very clear that the position of the market is not so bad as it seems. If heavy sales are being effected, this is due, not to the large holders of South African scrip, but to the small speculators and investors, who only see in the persistent downward movement an evidence of chronic instability from which it is hopeless to expect the market to recover. The great financial houses know well enough that while the Witwatersrand gold mining industry continues to develop as it is doing at present the shares will maintain their high intrinsic value, and if prices are falling this is no reason for throwing shares on the market under the impression that it is better to bear the losses they have than to fly to others they know not of. They are perfectly aware that the market is being manipulated to a more or less appreciable extent by the financial groups, of which they may, perhaps, themselves form a part, and when it suits these groups to bear mining shares they will do so, and those who have had sense enough to hold on to their good shares will profit materially thereby. It is indeed a well-known fact that a good many of the financiers and banks are taking up much of the scrip that is now being offered at very low rates, and they are apparently little disposed to protest against the tactics of the English and French professional bears who are just now doing their best to depress values to the lowest possible point. The rumours that have been industriously circulated of late as to possible complications between England and the Transvaal, and of alleged crises that have arisen among certain of the individual companies, have done much to shake the faith of the timid investor in the future of South African mines, and for some weeks past there has been a steady off-loading of scrip. Brokers now profess to believe that the selling movement is coming to an end. The weak holders have been selling so freely that there must be very few of them left, and that, consequently, the position is ripe for a general improvement. This, however, is a somewhat optimistic view of the situation, and there is nothing for the moment to justify the belief that an early upward movement will take place.

One of the most serious elements that tell against any immediate recovery of South African shares is the fact that a considerable number of people who purchased scrip last autumn at inflated rates are awaiting a chance to relieve themselves of their holdings under the best conditions possible. A rise in values to anything approaching the quotations prevailing a year ago would thus inevitably result in the throwing of great quantities of shares on the market, and another set back would be almost certain at a time when it would be most necessary to carefully nurse the market. Of course, it is quite probable that this check would be merely a temporary one, though whether this be so or not would depend entirely upon the strength of the recovery. Moreover, investors are showing a disposition to exercise more caution than formerly in the selection of their scrip, and are discriminating with more care between the good and bad mines. This, however, is invariably the case when the quietude of the market gives them more time for reflection, and it yet remains to be seen whether they will profit by their lessons at the moment when prices undergo an upward movement. As it is, it is pointed out that there are scarcely a dozen mines of which the yield justifies the quotations at which they have been for some time selling, and even some of these will be unable to undergo further development without the aid of additional capital. In fact, the heavy capitalisation of the various companies rendered necessary by the perfected systems of working needed to deal with the comparatively poor blanket reef is one of the factors that awakens a good deal of doubt as to the prospects of the Rand mines in the minds of French investors. The yield may go on increasing at a rapid rate, it is true, but if the capital employed has to keep pace with the results obtained the benefits accruing to the shareholders are not materially enhanced. It is, however, fully recognised that the Rand industry would be capable of paying much greater dividends if it were only relieved from the many burdens that are imposed upon it, and it is to this question that the French have been giving increasing attention of late. In thus trying to create a distinction between the good and indifferent mines, the French have come to the conclusion that their attention ought to be confined to a dozen at the most, for beyond these there is practically nothing so far of which the prospects would warrant an advance upon the prices now being quoted. Investors here are, therefore, of opinion that the dividend-paying mines might reasonably undergo an upward movement, but that the others, whose prospects are not clearly defined, should be left alone. If this policy were invariably adopted it is to be feared that mining enterprise would hardly be able to make so much progress as it does at present, and it is perhaps advisable that precept and practice do not always go together, and that the majority of investors prefer to take a little risk in the hope of securing larger returns.

While all classes of buyers are thus little disposed to deal in South African shares for the moment, it was only to be expected that the business done on the Bourse during the past week should have been restricted within very small limits. All the speculative scrip has especially suffered from the quietude, and this has been accentuated by the necessity of one of the firms disposing of large blocks of East Rand. Gold Fields have also been extremely quiet,

and Chartered have weakened on account of bearing rumours as to the probability of this company being called upon to pay a heavy indemnity to the Boer Government. Prices all round have consequently been dropping steadily, and will, no doubt, continue to do so until the London Stock Exchange displays renewed confidence in the future of South African shares by sending over higher quotations. As Kaffirs practically rule all other descriptions of mining shares, it is only natural that the quietude in this department should have intensified throughout the market generally, and while capital continues to show so little disposition to interest itself in mines, there is a complete absence of new mining enterprise. The syndicates themselves are even participating in the depression to the extent that their shares have dropped appreciably during the past few days, and it is thus hardly possible that they will follow up their propositions to carry out mining undertakings in Australia and elsewhere until the situation becomes more favourable.

## MINING IN CORNWALL AND DEVON:

NOTES ON MINING IN THE WEST.

(FROM OUR OWN CORRESPONDENT.)

THE continued decline in tin is so monotonous as to be uninteresting. It has been going down for days gradually, and has touched now a point lower than at any time since 1878. The outlook does not look very promising either—that is to say, the immediate outlook—for with the further increase in stock, which the figures for September showed, the continued heavy shipments from the Straits, and the possibility of consumption being still further restricted by a strike among the Welsh tin-plate workers, are all against the chances of a recovery just immediately, at any rate. Then if these unfortunate circumstances did not exist there would be the uncertainty in regard to the American presidential election, which would tend to check any forward movement, so that it seems idle to look for much change until after the result is announced, and by that time it is just possible that the other adverse conditions may have become modified. The only question which seems to be asked here now is as to how much lower tin is going; the Cornish shareholder wants to see it touch rock-bottom as soon as possible, for the sooner then will come the reaction. He remembers, and it is the recollection of it which has enabled him to retain his sanguine temperament, that evil days have fallen on Cornish mining before; he was told in 1873, when the Australian discoveries were made, that Cornwall was done, and that the mines might as well close at once. But there were a good many who were confident enough that consumption and production would right themselves once more, and, as events turned out, they were well repaid for their pluck, for, after several years of depression, there came a time—in 1879—when it was found that consumption had run away with the stocks, and up went the price with a bound, in fact, with too much of a bound, for there was an undue inflation, and the consequent reaction. But even the reaction only brought the price back to about double the present figure. If this happened in 1879, and we believe it also happened in the 'forties, there is at least no reason why history should not repeat itself once more.

ANOTHER thing which is inducing a good many people to hang on to stock which is not now costing them much is the possibility of some important discoveries being made. There is no use getting away from the fact that in consequence of the curtailment of operations which the depression has necessitated, there have been no discoveries of any consequence in the last year or two. With the new era of Limited Liability, and a fair amount of capital awaiting for development, the chances of discoveries are greatly increased. And in this matter two speculators in tin mines have something in history—and not very ancient history—to back them up, for they remember that in this last depression of 1878, the Peavor Mines raised all their tin and made their profit of £100,000 with tin at its present figure or thereabouts; and there is no reason why Carn Brea or Basset should not meet with similar good fortune now. In the share market there is absolutely nothing doing, and the quotations which are given of the prices of shares are purely nominal, and do not represent any transactions in them.

So far as we can learn there is nothing doing yet in regard to Wheal Agar and East Pool, and the new lease of the former mine. We certainly do not believe, and we have some reason for saying so, the rumours which have been on some people's lips for the last few days to the effect that Lord Roberts has granted a new lease to Wheal Agar executive. On the other hand, we cannot discover that East Pool committee have yet made any definite overtures. To speak candidly, we have a very strong opinion that East Pool are not particularly anxious to push things on too fast just now. It might, for instance, be inconvenient, to say the least of it, to find themselves under an obligation to at once fork the water from Agar and drain the two mines. That is a big job, and means a lot of money, and it is very doubtful whether East Pool shareholders will care to tackle it with tin at its present price.

THE meeting of shareholders will be held on October 19, when the latter will have to face a serious state of things. The west ground is all under water, and the sales of tin amount to no more than 6 tons per week. A heavy loss is inevitable.

KILLIFRETH meeting will be held next week—in Portsmouth, of all places in the world. Probably it will be the first mine meeting ever held in the great dockyard town. The majority of the shareholders reside in Cornwall, and the holding of the meeting in Hampshire has given rise to a considerable amount of dissatisfaction.

ANOTHER meeting which is fixed for next week is West Kitty. In spite of the adverse circumstances under which the mine, in common with all others in the county, is now carried on, a small profit will be shown.

BLAST FURNACES OF THE UNITED KINGDOM.—Total number of furnaces built on September 30, 1896, 690. Total number of furnaces in blast on September 30, 1896, 373. No change in the number of furnaces built since June 30, 1896, nil. Decrease in the number of furnaces in blast since June 30, 1896, 2. Furnaces blown in since June 30, 1896, 9:—Cumberland (1). Cammel, C. & Co., Limited, 1. Derbyshire (1). Staveley Coal and Iron Co., Limited, 1. Durham (1). Palmer's Shipbuilding and Iron Co., Limited, 1. Yorkshire, N.R. (2). Normandy Iron Works Co., Limited, 1. White-well, W. & Co., 1. Glamorganshire (1). Swansea Hematite Iron Co., Limited, 1. Monmouthshire (1). Pyle and Blaiva Works, Limited, Pyle, 1. Ayrshire (1). Baird, W. & Co., Elginton, 1. Lanarkshire (1). Baird, W. & Co., Gartsherrie, 1. Furnaces blown out since June 30, 1896, 11:—Cumberland (1). Lonsdale Hematite Iron and Steel Co., Limited, 1. Lincolnshire (1). North Lincolnshire Iron Co., Limited, 1. Northamptonshire (1). Wellingboro' Iron Co., 1. Nottinghamshire (1). Madeley Wood Co., 1. Durham (1). Carlton Iron Co., Limited, 1. Yorkshire, N.R. (1). Acklam Iron Co., Limited, 1. Glamorganshire (1). Darwen and Mostyn Iron Co., Limited, 1. Monmouthshire (1). Pyle and Blaiva Works, Limited, Blaiva, 1. Lanarkshire, (3). Coltness Iron Co., 1. Dixon, Wm., Limited, Govan, 2. Furnaces being built at present time, 1:—Monmouthshire (1). Pyle and Blaiva Works, Limited, Blaiva, 1. Furnaces being rebuilt at present time, 3:—Staffordshire, South (2). Hingley, N. & Sons, 1. Roberts & Co., 1. Glamorganshire (1). Briton Ferry Works, Limited, 1.—*Ryland's.*

## LATEST FROM THE MINES.

## CABLEGRAMS AND TELEGRAMS.

AMERICAN BELLE.—The following cable information has been received from the mines:—"Output for August month: National Belle Mine, 125 tons; value \$150. Hudson Mine, 165 tons; value \$1550."

ALADDIN'S LAMP.—The following cablegram has been received from the superintendent at the mines:—"Six weeks' return totals 3011 ounces of gold; approximate value, £11,040; namely, 360 tons of ore have been crushed, yielding 2446 ounces, and 5 tons rich crude ore have been shipped containing 561 ounces." This is the final clean-up for financial year just ended. The next run will be for three weeks to resume regular course.

BARRETT GOLD.—September gold return 600 ounces. The dry crusher and six additional cyanide vats in course of construction are expected to be completed by November 1. Meantime large stocks of ore are accumulating.

BONANZA.—Results for September:—"A cablegram has been received from the head office, Johannesburg, stating the following results for last month:—"Crushed, 2890 tons; obtained from mill, 2683 ounces; obtained from cyanide works, from 2100 tons of tailings treated, 1319 ounces; total, 4002 oz."

BAYLEY'S REWARD CLAIM AND BAYLEY'S REWARD No. 1 SOUTH.—Cabled advices have been received from the head offices of the above-named companies that the resolutions for the amalgamation of the companies were duly confirmed at meetings of the companies held in Melbourne on the 8th inst. The transfer books of the companies are now finally closed.

BLOCK B. LANGLAAGTE ESTATE.—Production for September (by cable):—"Mill. Stamps running, 75; ore crushed, 7922 tons of 2000 lbs.; gold retorted, 1971 ounces.—Tailings, cyanide process, 500 ounces.—Concentrators, cyanide process, 204 tons of 2000 lbs.; gold recovered, 350 ounces. Total gold recovered, 2821 ounces."

BAKER'S CREEK.—Result of crushing to October 3, 247 ounces retorted gold.

BALAGHAT MYSOORE.—The London office has received the following cablegram from Mr. Richards:—"182 ounces of gold obtained from 2825 tons of tailings."

CHAMPION REEF.—The London office has received a telegram from the mine, dated October 3, giving last month's return of gold as follows:—"6747 tons of stone produced 7012 ounces of gold; 2180 tons of tailings produced 593 ounces of gold; total production for the month, 7605 ounces of gold."

CHAMPION REEF (Nannine, W.A.).—Translation of cable received from the general manager, dated Nannine, Sept. 28, delayed in transmission:—"The main shaft is down 160 feet. We have received the foundations for the mill, and are now in a position to complete the battery without further delay."

COROMANDEL.—The London office has received a telegram from the mine, dated October 3, giving last month's return of gold as follows:—"1400 tons of stone produced 810 ounces of gold."

COSMOPOLITAN.—The following cable has been received from the company's agent at the mines for the month of September:—"176 tons treated produced 414 ounces of retorted gold."

CUMBERLAND.—Cablegram giving the result of cyanide operations for the month of September:—"Tailings works recovered 241 ounces from 408 tons at a cost of £252. The estimated value is £525."

CENTRAL DE KAAP.—The manager reports under advice dated September 3:—"Yesterday's and to-day's panning assay shows 25 to 30 cwt. gold, deep in colour, with but slight admixture of silver."

CITY AND SUBURBAN.—Last month's crushings yielded 9968 ounces.

CLUTHA.—The following advice has been received from the mine:—"C winze is now connected with the 200 feet level—pannings on this winze run from 4 dwts. to 2 ounces.—200 feet level. Reef well-defined, in face 4 feet 6 inches; panning all through the bottom are very good, with very heavy gold."

CASSEL COAL.—A cablegram just received gives the output for the month of September as 31,500 tons; profit, £730.

CONSOLIDATED MURCHISON.—Cablegram received states:—"Day Dawn Mine, 505 tons crushed, obtained 213 ounces of gold."

DE LAMAR.—The following is the cabled return for the month of September:—"Crushed during the month 4770 tons; bullion produced in the mill, \$58,610; estimated value of ore shipped to smelters, \$5200; miscellaneous revenue, \$295; total produce, \$64,105; total expenses, \$44,090; profit for the month of September, \$20,015; or at \$4.90 to £ sterling £4085." The directors have declared an interim dividend (No. 21) for the half-year ending September 30 of 1s. per share (free of income tax) payable on the 31st inst. to all shareholders on the company's books on the 6th inst.

DAY DAWN BLOCK AND WYNDHAM.—Cablegram from the general manager at Charters Towers giving the result of the crushing for the fortnight ending the 3rd instant:—"Tons crushed, 1285; yield of gold, 868 ounces; approximate value, £3000; fortnight's expenses, £2170."

DURBAN-ROODEPOORT.—The following results for September have been received by cable:—"Quartz milled, 9620 tons; 75 stamps; 27 days; 4357 ounces. Tailings treated, 6440 tons; 27 days; 1758 ounces. Total, 6115 ounces." The warrants for dividend No. 23 were posted to shareholders on Saturday, the 26th ult. All news from the mine is satisfactory.

DUNDERBERG GOLD MINES.—The directors have received information by cable from the manager that the mill will start running on October 25.

EAGLE'S NEST.—The London office has just received the following cablegram from their manager at Barberton:—"Struck a rich body of ore, 10 feet in width, East Drift Moonstone."

EAST MURCHISON UNITED.—A cable has been received from the mine stating that a clean up will take place on October 10, and it is expected that the result will be cabled home about October 16.

FRONTINO AND BOLIVIA.—The directors have received a cablegram from their manager, giving the result for September as follows:—"Estimated produce, £10,540; estimated cost, £5430; estimated profit, £5110."

FERREIRA.—Copy of cablegram received from Johannesburg:—"Results for September. Crushed, 10,565 tons; gold extracted, 9020 ounces; concentrates caught, 213 tons; assay value of concentrates 7 ounces; fine gold per ton, equal to (say) 1491 ounces.—Cyanide works. Bullion produced from tailings, 3309 ounces; total gold from all sources, 13,820 ounces."

GEORGE GOCH AMALGAMATED.—The following cable is just to hand, advising work done during September:—"2965 tons crushed, yielding 2264 ounces gold, and 1608 ounces from tailings."

GELDENHUIS MAIN REEF.—Result of September crushing:—"2927 tons crushed, yielding 1025 ounces of gold; 1860 tons treated by cyanide, 402 ounces of gold; total, 1427 ounces of gold; profit for the profit, £796."



**GELDENHUIS DEEP (LIMITED).**—The following cable has been received from the mine manager:—"Mill ran 24½ days. Crushed from mine 14,080 tons; development dump, 975 tons; total, 15,055 tons, yielding 3506 ounces. Cyanide treated, 9730 tons, yielding 2900 ounces. Total yield, 5515 ounces. Mining profit for month, £1250."

**GRASKOP.**—Return from the mine for the month of September:—"Ore treated 740 tons, yielding 255 ounces of gold. Total yield January 1 to September 30 1931 ounces."

**GOLDEN ARROW.**—The company's superintendent, Captain N. M. Howitt, cables under date 6th inst.:—"Water increasing. Water giving much trouble."

**GEM OF CUE.**—The directors have purchased a 10 head battery complete, now within 2 miles of the mine. The purchase of the Stowell property has also been completed.

**GELDENHUIS ESTATE AND GOLD.**—A cablegram has been received from the head office, Johannesburg, stating the following results for last month:—"Crushed, 15,931 tons; obtained from mill, 4513 ounces of gold; obtained from concentrates by cyanide, 347 ounces of gold; obtained from tailings by cyanide, 1445 ounces of gold; total, 6305 ounces of gold."

**HANNAN'S KING (Brownhill).**—Mr. A. G. Burge the company's engineer, cables from Perth (W.A.) under date October 1 (delayed in transmission):—"Arrived here safely yesterday. Statements and estimates hitherto made will be found correct. The Mount Charlotte lode is dipping into our ground; the ore is similar to the Brownhill lode."

**HANNAN'S "SIR JOHN FORREST."**—Cable to hand from Mr. J. Woolcock, the mining manager:—"Since last report the main shaft has been sunk a further 7 feet, total from surface 200 feet. The western crosscut has been advanced 18 feet, total from shaft 72 feet.—No. 3 shaft. The crosscut east has been extended 14 feet, total 32 feet from shaft."

**HAMPTON PLAINS ESTATE.**—A cablegram has been received confirming the discovery referred to by Mr. Allen H. P. Stoneham as "Majors" at the general meeting. The cablegram is as follows:—"Hampton Gold Fields selection, Block 53. Have struck rich ore on the 70 feet level. The width of the reef is 3 feet, assaying 10 ounces."

**HANNAN'S STAR.**—The following cablegram has been received from the mines' superintendent:—"The ore body continues to improve in quality in the north end level. James' shaft; have had samples assayed by Tinley at Kalgoolie with following results—12 ounces 16½ dwts. per ton, 14 ounces 16 dwts. per ton. I have let a contract to sink a shaft £3 per foot."

**HANNAN'S BLOCK 45.**—In the cable which we published last week, the assay value of the ore should have read "22 ounces per ton," not "12 ounces per ton."

**HANNAN'S NORTH CRESSUS.**—The following cable was received by the above company from Coolgardie on the 3rd inst.:—"Have returned from making the examination of North Cressus. First shaft 120 feet crosscut to the east 130 feet. Second shaft 100 feet crosscut to the east 90 feet. Crosscut to the west 100 feet being continued. The adjacent mine (Cressus) is opening up splendidly. Will leave to-morrow for mine again. Will then send full details. I consider it a most valuable property.—G. P. Hurst."

**HENRY NOURSE.**—Result of operations for September:—"Mill ran 28 days; crushed 8554 tons; treated 5570 tons cyanide; total, 7015 ounces produced."

**IVANHOE.**—Cablegram from Melbourne, dated October 3:—"During the past four weeks have crushed 215 tons for a yield of 832 ounces of gold. This ore is from the middle and east lodes."

**JUMPERS.**—A cablegram has been received from the head office, Johannesburg, stating the following results for September:—"Crushed, 11,449 tons; obtained from mill, 3873 ounces of gold; from concentrates, equal to 781 ounces of gold; from tailings by cyanide, 860 ounces of gold; total, 5514 ounces of gold. Profit for month, £3700."

**JUBILEE.**—Last month's return:—2021 ounces obtained from 4968 tons. The tailings realised 631 ounces.

**KOFFYFONTEIN.**—We are informed their returns for the month of September are 4650 carats.

**KABONGA.**—The following cable has been received:—"Borehole through 13 feet 6 inches. Heavy influx of water, quite satisfactory, proves have struck upon great lead. We are now pumping 570,000 gallons of water per 24 hours, so as to drain. Prospects are undoubtedly good."

**KOMATA QUEEN.**—The directors have received the following telegram from the manager, viz.:—"The country rock is of a highly favourable character. The ore in the face improves as we go on."

**KAPANGA.**—The directors have received the following telegram from the manager, viz.:—"In the 940 reef shows gold freely. 1000 crosscut to the south-east extended 10 feet. New developments most encouraging. The stopes are looking better. Corby shaft has been sunk 6 feet; prospects encouraging."

**KOMATA REEFS.**—The directors have received the following telegram from the manager, viz.:—"Argall's reef has developed a large body of high grade ore. General results are satisfactory."

**KATHLEEN CROWN.**—The directors have received the following telegram from the manager, viz.:—"The shaft is being sunk through hard rock. Hoisting engine ready next week. No. 1 reef showing specks of visible free gold."

**LANGLAAGTE ESTATE AND GOLD.**—Production for September (by cable):—"Mill. Stamps running, 160; ore crushed, 20,219 tons of 2000 lbs.; gold returned, 6491 ounces. Tailings, cyanide process. Tons treated, 11,000 tons of 2000 lbs.; gold recovered, 1707 ounces.—Concentrates, cyanide process. Tons treated, 490 tons of 2000 lbs.; gold recovered, 1499 ounces. Total gold recovered, 9697 ounces."

**LANGLAAGTE STAR.**—Production for September (by cable):—"Mill. Stamps running, 60; ore crushed, 2320 tons of 2000 lbs.; gold returned, 589 ounces.—Tailings, cyanide process. Tons treated, 4230 tons of 2000 lbs.; gold recovered, 604 ounces.—Concentrates, cyanide process. Tons treated, 200 tons of 2000 lbs.; gold recovered, 204 ounces. Total gold recovered, 1187 ounces."

**LE CHAMP D'OR FRENCH.**—The following cablegram has been received from the manager at the mine at Johannesburg:—"During the month of September mill worked 25 days; crushed 6800 tons, yielding 1980 ounces; cyanide treated 4400 tons, yielding 749 ounces; total, 2729 ounces."

**LAKE VIEW CONSOLS.**—The following cablegram has been received from the mine superintendent:—"Crushed 675 tons, obtained 2003 ounces of gold; 10 stamp mill ran 500 hours."

**MENZIES CONSOLIDATED.**—Cable information has been received from Mr. Weekley, the manager at the mines, to the following effect:—"Princess Eva claim. Shaft, 100 feet level, driven north 64 feet, lode 3 feet wide, medium quality. Vigorous prospecting from several places being carried on.—Level completed. Shall proceed to develop lode at both levels.—Princess Ada claim. Crosscut at 100 feet level 140 feet. No change to report here.—Prince John claim. Crosscut to the east in 100 feet. Crosscut to the west 15 feet.—St. Albans group.

West shaft, 210 feet (ground), continues very hard and dry.—Battery. Boiler arrived."

**MENZIES GOLD REEFS.**—Cable information has been received from the manager to the following effect:—"Clean up No. 8. Hours run, 367; tons crushed, 372; yield smelted gold, 407 ounces; tailings assay, 11 dwts. Stone from Friday water shaft and underlay shaft. The total number of tons crushed to date, inclusive of the above, is 1713; yield, 2321 ounces gold."

**MENZIES CRUSOE.**—Cable information has been received from the manager at the mines to the following effect:—"Clean up No. 7. Hours run, 555. Tons crushed, 500. Yield smelted gold, 948 ounces. Tailings assay, 10 dwts. Stone from north shaft, E shaft, and F shaft." The total number of tons crushed to date, inclusive of the above, is 1890; total yield, 4520 ounces gold.

**MCKENZIE GOLD MINES.**—The undermentioned cablegram has arrived from Mr. Frank Nicolas, the company's consulting engineer:—"Glenloth. Water level has been reached at 157 feet."

**MEYER AND CHARLTON.**—Crushed 9755 tons, gold won 2795 ounces, extracted from tailings 1451 ounces, total 4249 ounces; profit for month (September) £4066.

**MOUNT LYELL.**—The following cable, dated the 7th inst., has been received by this company's London office from its head office at Melbourne:—"Second furnace running satisfactorily; company ordering additional plant in order to increase the output to 500 tons daily."

**MONASTERY DIAMOND.**—Cable received 8th inst. states:—"121 loads yielded 24 carats."

**MOUNT LYELL.**—The following cable, dated 3rd inst., has been received by this company's London office from its head office at Melbourne:—"One furnace treated 2690 tons ore during the month ending September 21. Assay value of ore—copper, 5.81 per cent.; silver, 5 ounces 6 dwts. per ton; gold, 3.7 dwts. per ton, resulting 207 tons converter matte containing copper, 147 tons; silver, 13,550 ounces; gold, 486 ounces."

**MONTANA.**—By cablegram from the mine the directors are informed that the total output for September was 6200 tons of ore which contained gold, 2160 ounces; and silver, 9050 ounces. The estimated realisable value of the same is \$49,100. Expenditure—Working expenses on revenue account \$34,500, outlay on developments \$6900, outlay on Blue Bird and Hickey Mine \$600, extraneous expenses \$1900, permanent improvements and machinery \$230, total \$44,100, estimated net result \$5000.

**MYSORE.**—Telegram from the mine gives the return of gold for the month of September as follows:—"5060 tons of quartz produced 7736 ounces of gold. 4300 tons of tailings produced 1400 ounces of gold. 1677 tons of tailings (cyanide process) produced 192 ounces of gold. Total production for the month 9328 ounces of gold."

**MYSORE REEFS (Kangundy).**—The following cablegram, dated October 5, has been received from the mine:—"550 north, width of lode 1 foot 6 inches, assaying 1 ounce 3 dwts. per ton."

**MYSORE WEST AND MYSORE-WYNAD CONSOLIDATED.**—The manager cables the result of crushings for the month of September as follows:—"Tank Block. After a mill run of 598 hours, 1400 tons, 285 ounces of gold."

**NEW CRESSUS.**—Production for September, 63 stamps, 23 days, 2109 ounces.

**NEW CHUM GOLD MINES.**—The directors have received the following copy of a cable to hand from the mining manager:—"Since last report the winze from No. 7 level, 110 feet east of main shaft, has been sunk 30 feet, total depth 50 feet; at bottom of winze have cut several branches of quartz. The reef in No. 6 level driving south is improving in quality."

**NEW QUEEN.**—The London office has received the following cablegram dated Charters Towers, October 7:—"There is a very favourable change in vertical shaft cutting into formation."

**NEW CHIMES.**—The result of last month's crushings yielded 1774 ounces of gold.

**NEW RIETFFONTEIN ESTATE.**—The Johannesburg Consolidated Investment Company announce receipt of the following cable from the above company:—"Production for September, 1948 ounces, 50 stamps, 23 days."

**NEWHOUSE TUNNEL.**—The following cable has been received from Denver:—"Denver, October 3. We have driven during the past month 190 feet."

**NIGEL.**—Last month's crushing yielded 1058 ounces battery, 1009 ounces cyanide; total, 2067 ounces.

**NEW GUSTON.**—The following cable information has been received from the mines:—"Output for August month, 82 cars (say) 820 tons; value estimated, \$6850; mine expenses, \$8950; expended on exploration works, \$4300. We have also expended \$2250 upon machinery, and have laid in stores for the winter amounting to \$1900."

**NEW ZEALAND CROWN.**—During the month of September the battery, including 20 additional stamps, has crushed 1017 tons of ore, being double the output of the previous month. The exact value of the bullion will be known in a few days. Tons mined during the month, 920. Mr. Daw, the manager, states in his cable report that the body of ore is increasing in width, and that the mine is looking well. Orders have been given to increase the water race from 30 to 60 head.

**NEW HEIDELBERG-ROODEPOORT.**—The Johannesburg Consolidated Investment Company (Limited) announce receipt of the following cable from the above company:—"Will commence crushing on Saturday, October 10."

**NEW QUEEN.**—The company has received the following cablegram, dated Charters Towers, October 9:—"Drilled into quartz, vertical shaft."

**NEW HERIOT.**—Last month's crushing yielded 6011 ounces.

**NUNDYDROOG.**—This company has received a telegram from the mine giving the return of gold for the month of September as follows:—"3900 tons of quartz produced 3986 ounces of gold; 640 tons of tailings produced 94 ounces of gold. Total production for the month 4080 ounces of gold."

**NORTH CHARTERLAND EXPLORATION.**—This company has received cable advice from their administrator, Lieutenant Colonel R. Gardner Warton, that the mining engineers of the company have discovered a good body of payable ore at Misale, and that panning taken therefrom show excellent results, and are likely to improve.

**OMNIUM (O'Shea's Leases, Niagara, W.A.).**—A cablegram has been received from Messrs. Bewick, Moreing, and Co., of Coolgardie, who are managing the above leases for joint account of this company and the Continental and Western Australian Trust (Limited) as follows:—"Have received telegram from Mr. H. P. Woodward. We have struck reef, shaft No. 4, the width of the reef is 2 feet. We are not yet through. Pannings 3 ounces per ton.—Office note. Shaft No. 4 has been sunk in the southernmost of the two leases, where no development whatever had been made before. The result of assays from the northern lease was announced last week."

**OOREGUM.**—The London office has received a telegram from the mine, dated October 3, giving last month's return of gold as follows:—"5778 tons of stone produced 4212 ounces of gold; 5207 tons of tailings produced 809 ounces of gold; total production for the month, 5021 ounces of gold."

**QUEENSLAND MENZIES.**—The London agents, Messrs.

R. Clayton and Co., 88, Bishopsgate-street Within, E.C., have received a cablegram advising the result of a trial crushing of 41 tons; average stone 297 ounces.

**ROODEPOORT CENTRAL DEEP.**—The main shaft is down about 185 feet. The water has been taken up and conveyed into a sump, and is now lifted to surface by a steam pump. The permanent head gear is in place, and the workmen are engaged in erecting the framework of the hoisting engine and boiler houses.

**ROODEPOORT UNITED MAIN REEF.**—Result for S. p. tonner:—"70 stamps crushed 7625 tons, produced 3250 ounces, cyanide 912 ounces. Total 4162 ounces. Profit £3600."

**ROBINSON SOUTH AFRICAN BANKING.**—The Association of Mines of the South African Republic have cabled to their London agents, the Robinson South African Banking Company (Limited), that for the month of September an output amounting to 35,429 ounces was obtained by the following companies:—"Roodepoort United Main Reef, Meyer and Charlton, Princess Estate, Van Ryn, George Goch (Amalgamatid), Wemmer, Langlaagte Estate, Block B Langlaagte Estate, Langlaagte Star, New Midas Estate. This compares with 38,937 ounces in the preceding month."

**SANTA ANNA.**—The following cable has been received:—"Produce for the month, 173 ounces from 750 tons."

**SHEBA.**—The following cablegram has been received from the general manager for the month of September:—"10,295 tons of ore, 4875 ounces. 2650 tons of tailings, 1508 ounces 81 tons of concentrates, 683 ounces. Total, 7086 ounces. The mill ran 21 days; water very scarce."

**SALISBURY.**—Last month's crushing yielded 2150 ounces.

**SOUTH BENDIGO.**—The following cable is to hand from the manager:—"Since last report the main shaft has been sunk 8 feet, total from plat 250 feet, and from surface 1040 feet. Operations delayed owing to accident to machinery. Am repairing."

**SOUTHERN NEW CHUM.**—The subjoined cable information is to hand from the mining manager:—"Since last report the main shaft has been sunk 24 feet, total from plat 231 feet, and from surface 391 feet. In the No. 1 level am driving north on the Lawrence reef. Reef is small but is well defined vein, showing free gold."

**ST. JOHN DEL REY.**—The following telegram has been received from Mr. Chalmers:—"Produce month of September, 37,000 oitavas, equal to 4265 ounces troy, value £14,300. Yield per ton, 5.8 oitavas (68 ounces troy)."

**TAMWORTH.**—The following telegram, dated October 5, has been received:—"85 ounces of gold. This yield is from 23 tons crushed during 5 days. Should suggest that the crushing be continued one month. A considerable amount of dead work has been necessary. Will be completed within next few days. The mine looks even better than I anticipated."

**TOLIMA.**—The following cablegram has been received from the acting superintendent at the mines:—"September estimated returns, £4900; September estimated profit, £1100." In this return fine silver is valued at 2s. 9d. per ounce.

**TWIN LAKES PLACERS.**—The manager reports the following results for September:—"Cubic yards of gravel washed, 90,000 ounces; square yards of bedrock exposed, 15,000; square yards of bedrock cleaned, 22,000; estimated value of bullion produced, \$12,000."

**UNITED AUSTRALIAN EXPLORATION.**—Cablegram from Mr. Arthur S. Boucher, the superintendent engineer, dated October 7, Mount Magnet leases (Murchison District, Western Australia):—"Wheel of Fortune. 100 feet level opened up strong chute(s) of ore 72 feet long, reef is 3 feet wide, assaying 2 ounces 5 dwts per ton, face looks very well, dump 250 tons, assaying 3 ounces per ton.—Long reef. 100 feet level opened up fair chute(s) of gold, making total length of 160 feet, reef is 16 inches wide, assaying 1 ounce per ton."

**VICTORIA AND QUEEN.**—Messrs. A. Durant and Co., the London agents, have received the following cablegram from the head office at Charters Towers:—"Have finally cleaned up after crushing 62 tons of quartz; gross yield of 113 ounces of gold, making a total crushing of 818 tons for 1927 ounces of gold; approximate value, £6700. Have also cleaned up after crushing 88 tons second class ore for gross yield of 95 ounces of gold."

**WARD GOLD.**—Cable received:—"Shaft has reached a depth of 197 feet; expect ship first-class ore this month."

**WAIHI GRAND JUNCTION.**—The manager cables Oct. 6:—"Waihi West prospecting shaft.—South drive. Struck a strong lode; further particulars will be telegraphed later on."

**WESTERN AUSTRALIAN DEVELOPMENT CORPORATION.**—The following cablegram has been received from Mr. Frank Nicolas, our consulting engineer:—"Dorothy. Have cleaned up after crushing 50 tons of quartz; gross yield, 28 dwts. per ton, 70 ounces. Assay of tailings, 18 dwts. per ton, making 2 ounces 6 dwts. per ton, and giving a return of 115 ounces in all." A further cablegram states:—"Dorothy. Reef proved to a depth of 120 feet."

**WAIHI GRAND JUNCTION.**—The manager cables October 9:—"Lode is opening out well. Now in 6 feet."

**WAIHI SILVERTON EXTENDED.**—The following cable has been received from the local board at Auckland:—"The manager reports there is a great improvement in driving east. Thinks that chute of ore is quite new. Have had six samples assayed from the face, with the following results:—Assays average £7 5s. per ton. The width of reef is 7 feet. Samples picked ore £165."

**WAIHI SILVERTON EXTENDED.**—The following is copy of cable received from the local board in Auckland:—"The manager reports: Average assay value of ore to-day, £10 7s. 6d." This, no doubt, refers to the newly-discovered lode.

**WHITE FEATHER "REWARD" CLAIM.**—The following cablegrams have been received, viz.:—"There are 12,000 gallons of water in the 24 hours in the main shaft reward claim, and 4000 gallons in the cement shaft, on Eagle block." "September crushing yielded 330 ounces smelted gold from 163 tons crushed. Small tonnage entirely on account of boilers having broken down on September 14. Frequent stoppages of remaining boilers for the purpose of cleaning. One stoppage lasted six days. Repairs proceeding as quickly as possible." The total amount crushed to date is 2473 tons, which yielded 5266 ounces, the average being 2 ounces 2 dwts. 14 grains.

**WENTWORTH GOLD FIELDS PROPRIETARY.**—Superintendent has made a special clean up to the end of the financial year, September 30. The result is as follows:—"Three week's return totals 758 ounces of gold (approximate value, £2780)—namely, 615 tons of ore have been crushed, yielding 628 ounces and, 1 ton rich crude ore has been shipped, containing 130 ounces." The next clean up will be in six weeks' time to resume regular course.

**WORCESTER EXPLORATION.**—The result of last month's crushing yielded 2239 ounces of gold.

**WEMMER.**—The following cable is just to hand, the result of work done during September:—"5397 tons crushed, yielding 2850 ounces of gold, 23 days running; and from cyanide plant 5000 tons treated, yielding 1164 ounces from concentrates; 174 tons caught, assaying 85 dwts. Last month's poor output attributed to alteration of pump station."



## GOLD MINING IN BRITISH COLUMBIA.

(Continued from page 1252.)

## Centre Star and Idaho.

**A**REA, about 40 acres; title, Crown grants. Located in 1890, immediately east of the Le Roi and War Eagle, owned by the Centre Star Gold Mining and Smelting Company. President, P. A. Lory; secretary, T. G. Benham, Butte, Montana; general manager, Oliver Durant, Rossland. Capital stock, 500,000 shares, at \$1 each. This property is considered to be one of the best in the camp. Across the east end of the Centre Star claim runs in a northerly direction Centre Star Gulch, on the east side of which, in a diorite bluff, is exposed a ledge 30 to 50 feet wide, covered with the heavy iron-stained rock or true iron capping from the decomposition of the sulphides here present in mass. On either side of this ledge is a smaller one. The main tunnel enters on the outcropping of this main ledge on the west side of the gulch, and runs south-west about 1100 feet along the lead, heading for its objective point the Le Roi east end line. Several large bodies of low-grade ore are traversed, one of nearly massive sulphides or pyrrhotite being 147 feet long and 14 to 16 feet wide, while another is nearly 70 feet wide. From this tunnel crosscuts are being run to the side lines, and in one to the north, the north vein was cut at 280 feet where it is 4 to 6 feet wide of good ore, with a larger percentage of copper than is found elsewhere in the mine. At 180 feet in the crosscut to the south, the south vein is cut, but there it is small. Mr. Durant states that besides the large amount of low grade ore now in sight, there is much good shipping ore, but none will be shipped until the mine has been thoroughly explored and opened up for work and the conditions for shipping and smelting are the best. Already nearly 2000 feet of work have been done, and the ore taken out is being stored in a large dump for future use. There is at the tunnel mouth a good blacksmith shop and engine room, in which a 7 drill Ingersoll-Sargeant air compressor and an 80 horse power boiler, now running three drills in the mine with which 1600 feet of work have been done since December 3, 1895. Ventilation is secured by running pipes fitted with compressed air exhausts from the face of work to a shaft sunk on the lead and tapping the tunnel 410 feet from the mouth. After further work has been done a large shaft will be sunk, and a heavy hoisting plant put in, probably near the west end of the claim, and both railways will be easily available. Work will also be done soon to exploit the Idaho ground into which the large exposure mentioned leads, and has been traced through into the Enterprise claim on the east. Number of men at work, 23.

## Josie, Monte Cristo, St. Elmo, Mayflower.

These four properties have been incorporated under four distinct companies, for all of which Mr. F. E. Snodgrass, Spokane, is secretary, and Mr. Frank C. Loring mining engineer. The capital stock of the Josie is 700,000 \$1 shares; of St. Elmo, 1,000,000 shares at \$1 each; Monte Cristo, 1,000,000 at \$1, and the Mayflower, 1,000,000, at \$1 each share. Under the careful supervision of Mr. Loring all these properties are being economically and systematically developed. The claims all have Crown grant titles.

The Josie is situated along the north side of the Le Roi, and south of the War Eagle, and through its length can be traced on the surface two veins, the "main" and the "north," that have been opened up by several workings. The main tunnel was begun in ore that was soon cut off, and run in along a smooth wall, strikes north east by south-west, dip northerly until a fault was encountered with a throw to the south, beyond which extends a slope for 90 feet that runs up 30 to 40 feet, with ore 1 to 4 feet thick, and connects with the surface by a shaft. At a point about 250 feet from the tunnel mouth, in a short crosscut, a diamond drill hole to the north at 107 feet located ore supposed to be the north vein. Beyond this point the tunnel runs for about 100 feet between two walls, nearly vertical and parallel, 5 to 6 feet apart, with ore in the roof, sometimes 3 feet of solid pyrrhotite, but much sulphide is also scattered through the diorite and calc spar. Another faulting to the south is now met, and at this point a crosscut is driving north to connect with No. 4 shaft that is being sunk in ore in the north vein, the top of which shaft is 160 feet above the tunnel. A crosscut south shows some ore for 12 or 15 feet, while the face of the tunnel, in 480 feet, showed a little mineral. On the surface is a slope about 120 feet long, 3 to 4 feet wide, from which considerable ore was taken, and at the mouth of the tunnel in the ore there found is being sunk a two-compartment shaft, now 80 feet deep, and in ore which is being sorted and shipped with other ore in the mine to Tacoma. In the engine house, 30 by 60 feet, is a 7-drill Ingersoll-Sargeant compressor, and an 80 horse power boiler, a good galloos frame, connections with the Cameron sinking pump, and a 30 horse power boiler. Value, \$12,000. A crosscut tunnel is now being run from the Le Roi boundary, 250 feet, to tap the shaft. Number of men, 30; superintendent, Mr. Long.

The St. Elmo is a full claim, 600 feet by 1500 feet, on the south slope of Red Mountain, having near the west end a large exposure of very quartzose rock containing also calcite, zinc, blende, and iron and copper pyrites. Just east of this is a 100 feet tunnel to the north-west, in a fine grained diorite (?), with much iron and copper pyrites disseminated through the mass. Nearer the east end is the main tunnel, 225 feet long, with crosscut, the tunnel running along a wall east and west along which some ore has been taken out. The position of this claim is clearly indicated by a prominent bluff of rock deeply stained with red iron oxides, and the vein traversing the Monte Cristo, the Cliff and St. Elmo Consolidated, is believed to run through this ground. Number of men at work, five.

The Monte Cristo is another full claim, 600 by 1500 feet, located on the west slope of the Monte Cristo Mountain, 1 mile west of Rossland, and has running through nearly its entire length one of the most strongly defined ledges in the camp. The very fine grained country rock is little iron-stained itself, but on the ledge there is a heavy iron capping which, on being opened up, discloses 8 to 12 feet of solid pyrrhotite. Six or seven openings have been made, and work is now being done in a prospecting shaft to be 60 feet deep, tunnel No. 2, about 85 feet, with face all in a coarsely crystalline pyrrhotite, but having in the bottom a better grade of ore containing copper pyrites and calcite, and in tunnel No. 1. This tunnel is to be the main point of entry, and is being driven of a good size, well timbered at the mouth with sets 5 by 6 by 7 feet, having at the time of visit a full face of ore. So far, this large shaft of sulphides has proved valueless, assaying from traces to \$3 or \$3 in gold, but with the advent of a new character of ore in tunnel No. 2 much better assays are being procured, and the development of this claim is being watched with great interest. To expedite work a 7-drill Ingersoll-Sargeant compressor and an 80 horse power boiler are being put in near the small creek 200 feet below, and then the main tunnel will be rapidly advanced along the vein into the mountain. Course of vein, east and west dip, 70° to 75° north. Number of men, 20. Superintendent, Mr. F. H. Oliver. A spur 1/4 mile long can easily be run from the tramway to a point below tunnel No. 1.

The Mayflower is in the South Belt, or 1 mile south of Rossland, and the present work is being done in a tunnel, now 100 feet long, run in at track level, upon a vein that was exposed by a rock-cutting on the tramway. This vein, running about east and west, dip north 70° to 80°, showed for 30 feet along the tunnel carbonates, until the solid ore came in, or solid iron pyrite, with a large proportion of galena, also some zinc blende and calcite, carrying the chief value in silver, or in a shipment netting \$36, \$10 was silver, \$10 gold, and \$6 lead. The vein varies in width from a few inches to 3 feet, and can be traced by openings through the claim, while a parallel vein to the north has been more or less developed. The carbonates are soaked, and some have run as high as \$250, and the ore taken out is being piled by the track and sent down in lots to the smelter at Trail. Number of men employed, 10. Superintendent, F. H. Oliver.

Starting of the Le Roi and War Eagle is a number of claims on

which work is being done, as at No. 1 Surprise, Gertrude, Monita, and Pilgrim, and on the Mug Wump, that lies just north of the Iron Mask, a plant is now being put, under the management of Mr. J. Young, to exploit this property with the diamond drill.

## California.

Area, 52 acres; title, Crown grant. Location, 1500 feet west of the Le Roi and Josie Mines, on south slope of Red Mountain, owned by the California Gold Mining Company, Spokane. President, Hon. R. F. Pope, Cookshire, Quebec; secretary and treasurer, J. P. Graves, Spokane. Capital stock, 2,500,000 shares at \$1 each. Near the southern end of this claim is a 50 feet tunnel running north into barren country rock, and higher up are several shallow cuts and trenches. On all this claim the rock on the surface is very much iron-stained and decomposed, but no work has been done as yet disclosing the veins that are supposed to pass through this property. Mr. Frank C. Loring, one of the best mining men in the camp, will also direct the development work, which will consist at first of extensive surface work, trenches, and open cuts, &c.

## Nickel Plate.

Area, about 21 acres; title, Crown grant. Location, immediately south of the Centre Star and Idaho. This claim, and the small fraction O-e-or-No-go, are the property of the Nickel Plate Mining Company, of Salt Lake City. Capital stock, \$500,000 in \$1 shares. Superintendent, W. J. Williams, Rossland. Considerable careful development work has been done on this property, a shaft 150 feet having been sunk along a smooth wall with some ore present. At the 100 feet level a drift has been driven over 100 feet east and 110 feet west (July), showing more or less ore, dip 60° north. From the shaft a crosscut has been driven 235 feet north through the diorite, intersecting at 110 feet a shute of ore, which, in a slope 25 feet high, is 2 to 3 feet wide, of solid sulphides, consisting of pyrrhotite and copper pyrites, stated to be of high grade. This ore is also found scattered through this rock or gangue, and over 100 tons are on the dump awaiting better shipping facilities, as the line of railroad is surveyed to cross the claim near the shaft that will give easy access to the smelters. The crosscut will connect with the air shaft, which is now being sunk near where on the surface some ore is showing, and, after further development work proves up the value of the claim, a large and complete hoisting plant will be installed, the present plant—a 12 horse power boiler, blower, and a Knowles sinking pump—being sufficient for the present exploratory work. Number of men employed, 22. In Centre Star Gulch a shaft is being sunk on a vein that outcrops there, and ore is being taken out.

(To be continued.)

## MINING IN NEW ZEALAND.

## MINES STATEMENT.

By the Hon. A. J. CADMAN, Minister of Mines.

(Continued from page 1255.)

## Metaliferous Mines.

**V**ERY little has yet been done in the colony to prospect and develop mines other than for gold and silver. The only exports last year of metaliferous products other than gold and silver were 54 tons of antimony ore, 210 tons of manganese ore, and 62 tons of mixed minerals, representing an aggregate value of £2891.

Workings are still being carried on at Ohaeawai in the cinnabar deposits, and machinery and appliances are being erected to collect the metallic quicksilver, which is intermixed amongst the surface material, and also to distil the quicksilver from any ore that can be mined from open workings. The large quantity of gas in the ground where these cinnabar deposits exist, together with hot water, will, I fear, preclude mining the quicksilver ore in this locality to any great depth.

## Petroleum.

The boring for petroleum oil is still being carried on near New Plymouth. A little oil was found in the bore first put down close to the breakwater, but it is stated that sea water came into the bore, which caused it to be abandoned. Recently a new bore, to a depth of 1675 feet, has been put down a little nearer New Plymouth than the breakwater, but no oil of any consequence has yet been struck, but it is said that a large quantity of gas is now coming from the bore. This gives indications that petroleum will yet be found, but whether it will be obtained in payable quantities for working, time alone will determine.

## Kauri Gum.

Notwithstanding the large quantity of kauri gum exported every year, there was very little diminution in the amount exported last year, the quantity being 7425 tons, as against 8338 tons for the previous year. Although there was 913 tons less exported last year, the value exceeded that of the former year's produce by £14,193, the value of last year's produce being £418,768, which gives an average value of about £56 8s. per ton, whereas for the previous year the average value was £48 10s. 6d. per ton.

This industry affords a livelihood to a large number of both Europeans and natives; but the average earnings of persons employed in digging gum cannot be ascertained. No doubt the time is approaching when the gum will be exhausted, but a considerable period will yet elapse before this takes place. The total quantity of kauri gum exported since 1853 is 175,803 tons, having a value of £7,683,529.

## Roads and Tracks.

Notwithstanding the large expenditure already incurred in the construction of roads and tracks to open up the country in mining districts, to enable prospecting, and the development of the mines, to be carried on, the recent revival in mining, and the amount of capital coming into the country to be invested in mining ventures, will require further roads and tracks to be constructed to open up the back country: this will necessarily entail much expenditure before communication with the various claims recently taken up can be effected.

The total expenditure by the department during the last 14 years on roads and tracks for the development of the mining industry amounts to £174,833 in direct grants, and £79,242 in subsidies to local bodies.

## Water Races.

The construction of water races to bring a larger supply of water to work the alluvial drifts is one of the most important works in connection with the expansion of the mining industry. As I have already observed, there are large areas covered with auriferous drifts which will prove remunerative if a sufficient quantity of water can be obtained to work them on an extensive scale. The number of men employed in the alluvial workings will always be in proportion to the quantity of water available. In order to encourage the construction of works of this nature, where it is proved that a fair supply of water can be brought on to ground that will give employment to a number of men, a subsidy of one-third of the cost is granted under regulations to private parties for the construction of dams and water races. During last year a subsidy of £800 was authorised towards the construction of a water race from the Boaring Mog Creek to the terraces at the head of Healy's Gully, on the north side of the Grey River, between Blackball and Moonlight Creek. A subsidy was also given towards the cost of survey of a water race from Randall Creek to Napoleon Hill.

The water races constructed by the Government, and worked directly under the control of the Mines Department, and worked Waimea-Kumara and Mount Ida water races. The gross value of the sales of water from the Waimea-Kumara water race last year amounted to £4902, while the expenditure on maintenance was £2713; leaving a net profit on the workings of £2189. The Blackstone Hill race, amounted to £1326, while the expenditure on maintenance was £1393. This leaves a direct loss of £77 on the working of these races during the last year. The large expenditure last year on the Mount Ida water race was due to the severe winter and heavy fall of snow, causing slips in the side of the race, which had to be cleared out and repaired before work was again admitted. Taking the Blackstone Hill portions of the water races by themselves, there was a net profit on the working of £102, which is equal to about 10 per cent. on the cost, which was £1037.

## Prospecting.

Seeing the large area of auriferous country, both in alluvial ground and in quartz lodes, in the colony where scarcely any prospecting parties have yet been done, assistance has been given to prospecting parties wherever it was shown by either the Mines Association or local bodies that there was a probability of success attending the operations, and where these associations or local bodies undertook to supervise the prospecting operations.

I have already alluded to the discovery of gold-bearing stone in the shaft of the Kapanga Company at Coromandel at a depth of 930 feet. This may be regarded as the greatest discovery due to prospecting work last year. A bore was put down from the bottom of the shaft, and quartz was cut showing a little gold. It may be stated that the gold in the lodes in this mine cut out at about 420 feet from the surface, and 500 feet of barren ground has been gone through before another shoot of gold-bearing stone was found. This discovery will be the means of giving an impetus to other mining companies to test their ground at deep levels.

A subsidy up to £10,000 has also been applied for by the United Gold Mining Company, in the West Coast District, at the rate of £1 for every £2 to be expended by the company in accordance with the regulations for granting assistance towards prospecting at deep levels, but no definite decision has yet been arrived at, pending the receipt of details of the proposed work. As there seems to be a desire to dispose of properties to capitalists, in view of subsidies being granted by the Government, it is intended to carefully consider this aspect of the question before any subsidies are authorised under the regulations referred to.

As an evidence of the great interest at present taken in prospecting, I may mention that 22 licenses for prospecting outside mining districts have been issued since April 1 last, no less than seven of these licenses being issued for the Great Barrier Island alone, where also 13 extended prospecting licenses, authorised by the Act of last session, have been applied for to the Warden at Coromandel. Should a discovery be made of either gold or silver to warrant it, this island will be included in a mining district.

During last year £1726 4s. 8d. was expended in the different counties as subsidies towards prospecting—Coromandel, £206 4s. 6d.; Thames, £98 2s. 8d.; Manawatu, £116s.; Buller, £217 13s. 2d.; Grey, £59 14s. 3d.; Inangahua, £35 17s. 6d.; Westland, £625 16s. 4d.; Tairāpapa, £14; Southland, £77 14s. 6d.; Vincent, £73 2s. 8d.; Tairāpapa, £282 1s. 10d.; and Dunedin, £14s. 3d.

## Geological Explorations.

During last year the mining geologist carried on geological exploration in the Fjord County, with the view of determining the different formations, as to the probability of minerals being found in that part of the colony, which has never been properly explored. The discovery of gold at Wilson River, Coal and Crayfish Islands, as well as on the mainland in the vicinity of Preservation and Chalky Inlets, has led many persons to suppose that a large gold field may be opened up there. As far as can be ascertained by the mining geologist, the auriferous belt extends for about 20 miles in length, having a width of 5 miles. This belt runs along the coast line from Kiri Kiri, about 13 miles south of Preservation Inlet to Chalky Inlet. To the east of this belt there is a granite formation, in which lodes of argentiferous galena exist. Geological explorations were carried on in this locality over an area of about 500 square miles; and a plan showing the different formations has been prepared, and will be found annexed to the departmental reports for this year.

Geological explorations were also carried on in the Collingwood district. The chief examination in that portion of the colony being confined to the older auriferous gravels along the south-east side of the Aorere Valley, the largest development of these gravels being at the quartz ranges. A map has been prepared showing the area and formations where these auriferous gravels are deposited.

(To be continued.)

**THE EDUCATION OF MINING ENGINEERS.**—The President of the Midland Institute of Mining Engineers, Mr. G. B. Walker, delivered an address on "The Education of Mining Engineers" at a meeting of the Institute, held at Sheffield, on Saturday. Mr. Walker's opinion on the subject is entitled to respect, as he has a practical knowledge of the question with which he dealt, and is able to express his opinions with clearness. He remarked, in opening, that the coal trade of this country is hard pressed, and that Great Britain, in the matter of the coal trade, no longer possessed the supremacy. In view of the change in conditions, it is, in Mr. Walker's opinion, more than ever requisite that the mining engineer should have a very efficient, practical, and scientific training. He contrasted the life, those only would eventually survive who could most successfully bring to their aid the resources of science and highly-trained ability. Mr. Walker instanced the strides made by Germany in the development of her coal resources, and made a passing reference to the large measure of engineering skill and to the clever adaptation of means to ends by which the result had been obtained. The way to cope with German success was to copy German methods; and better technical education, more readiness to progress, and a scientific training were the first means to be employed, if we are to retain our commercial supremacy. A mining student, he submitted, should be trained in the art and practice of mining, in physics, chemistry, geology, machine construction and drawing, steam and steam engine, electrical engineering, surveying, and mining jurisprudence. In each of these he should have a thorough, not a superficial grounding. He contrasted the mining classes at the Durham College of Science and the Yorkshire and Firth Colleges with what he described as the more thorough systems of Belgium, France, and Germany, and advocated a complete system of technical education, with three years at a college to begin with, or, better still, two years at a colliery, three years at a technical college, two years at a colliery with such a training, and one year in a colliery office. A youth with such a training would be certain to be turned out thoroughly competent, and the course he suggested would be equal to that of France and Germany. He advised all those interested in the matter to appeal to the Government and the educational authorities for their help.

**A YORKSHIRE COLLIERY CLOSED.**—The Wharfedale Silurian Colliery Company have given notice of their intention to close a portion of the Tankersley Colliery on account of losses on workings.



## COMPANY FINANCE.

**Reports, Balance Sheets, Dividends, &c., of Mining  
and other Companies.**

### Geography.

(To be continued.)

THE MONTANA MINING COMPANY (LIMITED).

**NEW ZEALAND MINING TRUST.**

THE FORTUNA COMPANY (LIMITED).

The report of the directors to the shareholders states that the accounts which accompany this report show a profit on the six months' operations to June 30 last of £2019 15s. 9d. This compares with £1972 1s. 3d. for the preceding half-year, and is so far favourable, but as it was accompanied with some further decrease in the reserves of ore, the directors have felt it right, whilst increasing the dividend, to recommend the writing off of a liberal sum as depreciation from the "mines, buildings: and machinery account," so as to place the company

THE ALAMILLOS COMPANY (LIMITED).

**THE LINARES LEAD MINING COMPANY (LIMITED).**

**RIO TINTO COMPANY (LIMITED)**

**ANACONDA COPPER MINING COMPANY.**

— The COROMANDEL GOLD MINING COMPANY OF INDIA (LIMITED) have sold the gold produced in August for £2731 16s. 7d.

## GOLD MINING IN ONTARIO.

(FROM OUR OWN CORRESPONDENT.)

The most promising mine at the present time is the Soltana, situated 8 miles from Rat Portage. There are 70 men working on this mine with a 10 stamp mill. The mine has been in operation for about three years. About a year ago the run was from \$1000 to \$1200 per week. This year, however, it has averaged over \$3000 per week, and within the past month \$4600 was secured from one week's run. The ore is claimed to be free milling throughout the entire extent of the workings. A chlorination plant for treating concentrates has just been added. A very rich body of ore has been struck at a depth of 175 feet.

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(M.Inst.M.M., M.N.Eng.Inst.M.E.)

GIJON (ASTURIAS), SPAIN.

**FRONTINO AND BOLIVIA (SOUTH AMERICAN)  
GOLD MINING COMPANY (LIMITED).**

At a MEETING of the DIRECTORS, held this day, the follow-  
ing Resolution was passed, viz.:—  
RESOLVED—"That an Interim Dividend of 9d. per share, free  
of income tax, be this day declared, payable on and after the  
16th day of October, 1896, to the Shareholders on the Register  
of the Company on that day, and that the Transfer Books of  
the Company be closed from the 8th to the 16th October, 1896,  
16th day inclusive."

By Order of the Board,

J. JAMESON TRUBAN, Secretary.

184, Gresham House,

Old Bro. d Street, London, E.C.

October 5, 1896.

**THE LINARES LEAD MINING COMPANY  
(LIMITED).**

NOTICE IS HEREBY GIVEN, that the HALF-YEARLY  
GENERAL MEETING of the above Company will be held at  
the Office of the Company, No. 6, Queen Street Place, in the City  
of London, on THURSDAY, the 15th inst., at One o'clock p.m.,  
to receive the accounts, balance-sheet, and reports of the Directors,  
Auditors, Superintendent, and Mining Agents for the half year  
ending 30th June, 1896.

By Order of the Board,

H. SWAFFIELD, Secretary.

Registered Office, 6, Queen Street Place, London, E.C.,

7th October, 1896.

**THE FORTUNA COMPANY (LIMITED).**

NOTICE IS HEREBY GIVEN, that the HALF-YEARLY  
GENERAL MEETING of the above Company will be held at  
the Office of the Company, No. 6, Queen Street Place, in the City  
of London, on THURSDAY, the 15th inst., at Half-past One  
o'clock p.m., to receive the accounts, balance-sheet, and reports of  
the Directors, Auditors, Superintendent, and Mining Agent for the  
half-year ending 30th June, 1896.

By Order of the Board,

H. SWAFFIELD, Secretary.

Registered Office, 6, Queen Street Place, London, E.C.,

7th October, 1896.

**THE ALAMILLOS COMPANY (LIMITED).**

NOTICE IS HEREBY GIVEN, that the HALF-YEARLY  
GENERAL MEETING of the above Company will be held at  
the Office of the Company, No. 6, Queen Street Place, in the City  
of London, on THURSDAY, the 15th inst., at 1.45 p.m., to receive  
the accounts, balance-sheet, and reports of the Directors, Audi-  
tors, Superintendent, and Mining Agent for the half-year ending  
30th June, 1896.

By Order of the Board,

H. SWAFFIELD, Secretary.

Registered Office, 6, Queen Street Place, London, E.C.,

7th October, 1896.

**TO THE SHAREHOLDERS IN GREAT BRITAIN OF THE  
MOUNT LYELL MINING AND RAILWAY COMPANY  
(LIMITED).**

SIR OR MADAM,

I beg to inform you that I am a candidate for election as a  
Director of this Company at the General Meeting of Shareholders  
to be held in Melbourne on the 27th November next.

I base my candidature and solicit your support primarily upon  
the ground that as one of the largest Shareholders I have much at  
stake, and am, therefore, deeply interested in securing that in all  
departments of the Company's operations the utmost efficiency  
should be attained and maintained.

It is felt by many of the Australian Shareholders that at least  
one member of the Board should possess practical mining experience,  
and that my mining knowledge would be a source of strength to  
the Company. I have been thirty years engaged in the practical  
work of mining on an extensive scale, and for twelve years of that  
time my name has been specially identified with Mount Lyell. I  
was one of the pioneers of the field, and one of the principal  
original owners of the Mount Lyell blocks. Before that proprietary  
was merged in the Company I had personal charge of the mine and  
worked it profitably under difficulties which the introduction of  
capital has since removed.

At a recent General Meeting of Shareholders I gave expression  
to the very general desire of the Shareholders in Australia that the  
Board should take the Shareholders more fully into their confidence  
in regard to the Company's financial arrangements. Many Share-  
holders in Great Britain were not at the time in a position to  
appreciate the line of action of the Board's policy that brought  
about a movement by the Shareholders, which resulted in a change  
in the Board's policy that had become urgent. The present policy  
of the Company with respect to the publication of information as to  
developments at the mine also calls for amendment. Those of your  
number who are conversant with mining matters will understand  
what is still required in this respect. My presence on the Board  
may conduce to the prompt publication of necessary information.

Shortly stated, I invite your support because:—

As one of your largest Shareholders I have, in common with  
yourself, a large interest to conserve.

My experience as a practical miner, and my knowledge of the  
special characteristics and developments at Mount Lyell  
will, by my presence on the Board, be made available to  
the Company.

Being unable to obtain your names and addresses, I can only  
communicate with you by the imperfect medium of an advertise-  
ment. As I have no London address, I have arranged with my  
bankers, the Union Bank of Australia (Limited), to receive at their  
head office (Cornhill, London, E.C.) such proxies as are not sent to  
me direct. Proxies must be posted or left at the bank not later than  
the 15th October, in order that they may be forwarded by the  
mail of the following day.

I am,

Your obedient Servant,

JAMES CROTTY.

60, Queen Street, Melbourne, Australia.

September, 1896.

**The Mining Journal,  
RAILWAY & COMMERCIAL GAZETTE.**

ESTABLISHED IN 1835.

THE MINING JOURNAL, RAILWAY AND COMMERCIAL  
GAZETTE, published every SATURDAY MORNING, price  
SIXPENCE, is recognised throughout the World as being the oldest  
most influential, and most widely circulated Journal devoted to the  
interests which it represents. It circulates

ALL OVER THE WORLD.

Amongst Mine Owners, Capitalists, Investors, Mining, Metallurgical  
Engineers, Manufacturers, &c., &c.

THE MINING JOURNAL, RAILWAY AND COMMERCIAL  
GAZETTE has correspondents and sources of information in almost  
every quarter of the globe. Its policy is absolutely independent;  
its circulation is cosmopolitan.

THE MINING JOURNAL is neither controlled, nor is any  
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of the World.

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\* ADVERTISEMENTS (which should in all cases be sent direct to  
THE BUSINESS MANAGER) can now be received for the forthcoming issue  
of THE MINING JOURNAL, RAILWAY AND COMMERCIAL  
GAZETTE, on FRIDAY, at 12, FINCH LANE, E.C., up till 5 p.m., and  
at 3, DORSET BUILDINGS, SALISBURY SQUARE, E.C., until 9 p.m.

**REPRESENTATIVE IN**

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WEST AFRICA: O. SACREDOT, Green's Buildings, Johannesburg.

GERMANY: F. E. CLOTTEN, Kommodenstrasse 9, Köln a. Rh.

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LONDON: OCTOBER 10, 1896.

**NEW ZEALAND PROSPECTS.**

EVER since we first brought to the attention of the mining  
public the revival of gold mining in New Zealand, that  
colony has made so consistent and rapid a progress, that  
it is now established as a gold field of assured richness and  
permanence, with prospects which it were hazardous to attempt  
to forecast. It is particularly gratifying to ourselves to note  
the prominence which it has now attained, for when scarcely  
anyone believed in it as a coming gold field, we alone sounded  
its praises, and predicted that it was bound, in the natural  
course of events, to assert its claims to special attention.  
There is no gainsaying the fact that it is a wonderful gold field,  
and that everybody is convinced of this. For many years it  
had been slumbering, and the world was beginning to forget it,  
when suddenly it woke up with a wonderful vitality, as if  
during its long rest it had accumulated marvellous powers, and  
was prepared and determined to achieve great things. It has  
done so. It has astonished the world; it is astonishing it now,  
and will, doubtless, astonish it still more. All that it wanted  
was a little encouragement. It had lost confidence in itself, and  
seemed apathetic with the apathy of despair. But that encourage-  
ment was given, and has been amply justified by the colony's  
complishments. Its exploits have instilled absolute confidence  
in the minds of investors, who, no matter with what doubt  
they may regard other gold fields and other gold mines, display  
a kindly regard for New Zealand. It is not pleasant to dwell  
upon the condition of the Mining Market during the past  
month or two. Weakness and inactivity have characterized the  
session, and at times the dulness has been depressing.



only redeeming feature has been displayed by New Zealand, which, amidst the general flatness, have been the least affected.

The prospects of the colony are exceedingly bright. It possesses not only an abundance of the precious metal, but it is greatly favoured by Nature with the conditions for the successful working of it. In this respect it advantageously compares with other rich gold fields, and is one of the secrets of its great popularity. It has no labour difficulty; it does not suffer from an insufficiency of water; political troubles are unknown; and it enjoys an immunity from the evils which retard the progress of the Rand and Western Australia. As a result of the knowledge acquired of its unique conditions, very powerful arguments have turned their attentions from elsewhere to this promising colony, and their faith in its possibilities and potentialities is not likely to be disappointed. The richness of the colony, as our correspondent shows in his letters, is not confined to any one district, but extends over a large area. Considerable activity is everywhere displayed, with the result that we hear almost daily of new and wonderful discoveries. During the last week or two we have been publishing the annual statement of the Minister of Mines for the colony, an early copy of which we were successful in obtaining. That statement in itself is sufficient to prove how extensive the gold area is, and no intelligence is needed to forecast from its past history and present achievements what its future destiny is likely to be. Its resources have little in common with those of the Rand or Western Australia. The reefs are not distinguished for that uniform distribution of the precious metal which is the characteristic of the Main Reef series, nor are they so shallow and pocketed as in the sister colony. In places, the reefs have been extremely rich, and thus there is always the prospect of picking up a valuable prize. But a greater inducement is the evidence of permanence, and of payable richness in depth. Like the Rand, New Zealand has its deep levels, abundant testimony to which has already been furnished. There is the meeting of payable gold in the Kapanga Company's property at a depth of considerably over 900 feet, a discovery which must rank as one of the most important and encouraging features of the past year. It will impart confidence in the permanency of the reefs, and their valuable contents in the deeper levels, and promises a fresh lease of life to those gold fields where much of the shallow ground has become exhausted. It is also anticipated that during the coming year the testing of the deeper levels at Reef-ore will be undertaken, the prospects of which are most encouraging. What has worked wonders for New Zealand has been the cyanide process. The colony's remarkable progress has been due in a chief measure to the introduction of this, and its future also will be greatly dependent upon it. As evidence of what it has accomplished we have only to refer to a paragraph in the statement of the Minister of Mines wherein he says:—"In the Hauraki gold fields the cyanide process is now very extensively used, and it is of great interest to state that no less than 71 per cent. of the total production of the gold and bullion of those fields was extracted through the agency of that process. The extraction of bullion by the cyanide process last year was 82 per cent. of the total value of the bullion obtained in this district. Judging from these figures, the time is not far distant when the process will be more generally adopted at the mines in the North Island. During the past few years the cyanide process, in the hands of different metallurgists and engineers, has made rapid strides, chiefly in the designing of plants and appliances to facilitate the handling of the ore and reducing the cost of treatment. The ordinary cyanide process is not suitable for the treatment of all classes of ore, more especially that containing base metallic substances, including copper compounds; but no doubt modifications and improvements will be found to overcome the difficulty, as a result of the researches now being conducted by different metallurgists and chemists." What the process has done for South Africa it is destined to do for New Zealand. And that is a statement full of the greatest significance.

It is impossible to conclude an article upon the gold mining industry of this colony without making some reference, however brief, to the more prominent of New Zealand companies. The Hauraki, perhaps, will be the first to occur to the minds of most. Its brilliant achievements have been the cause of general astonishment. We have been dazzled by them, and Hauraki is now associated in the mind with ideas of all that is wonderful. The mine is situated in the Coromandel district, and is the chief gold producer there; in fact, during the past year it produced more than half the yield of gold from this field. As a consequence of its success a large number of mining properties have been acquired in the immediate neighbourhood, as has been apparent from the numerous prospectuses with which investors have been inundated during the past six months. Then there is the Kapanga, another company with brilliant prospects, and respecting the future of which Captain ARGALL has expressed himself in very hopeful terms. There is the Waihi, a concern which is always beating records in its monthly outputs, whilst the Waikeauri is also doing exceedingly well, and has a most hopeful future. In no wit behind these follow Tararua Creek and Preece's Point Proprietary, Kathleen Crown, Tokana of Hauraki, the Komata Reefs, and Komata Queen, all of which are opening up in a most encouraging manner. Neither must we omit to mention the Consolidated Gold Fields, the shares of which are always a special attraction to New Zealand investors, and are looked upon as a leading feature of this section of the market. Being a parent company, and possessing a very extensive area in some of the richest portions of the colony, this company has a magnificent future. During the past week the New Zealand market has suffered more or less from the prevailing dullness, but this, of course, should occasion no surprise. There is an air of depression overhanging the entire market, and each section of it naturally suffers. But it cannot be expected that this will last much longer, and when better times do come, New Zealanders will be amongst the first to benefit.

## MINING EDUCATION IN ENGLAND.

THE past week has been a memorable one in the annals of scientific and industrial education. At two of the chief mining schools of the country the sessional programme has been inaugurated with a peculiarly pleasing and graceful function. In London the venerable Dean of the Royal College of Science, whose rich and somewhat Johnsonian style of humour is so cordially welcomed by the old students at the annual dinner, gave a singularly appropriate address upon the occasion of the distribution of prizes and medals to successful students. To adapt the matter and tone of a speech to the sympathies of his audience is not always an easy task for a speaker, but Professor JUDN appears to have hit a becoming point of compromise between the professorial and didactic style suited to the lecturer's rostrum, and the freer rhetoric of personal intimacy. At the Durham College of Science the Home Secretary prefaced the work of the coming session with a forcible statement of the purpose and object which the founders of the institution had before them, and a stirring appeal to the students to profit in the largest possible way by the educational facilities open to them. Himself a man of the world, Sir MATTHEW WHITE RIDLEY was careful to give a practical stamp to his remarks that should not be void of result with the youthful audience who waited upon his words, and his speech will rank high among the advisory exhortations which come "thick as tile" with this season of the year. It is at once interesting and profitable to compare the two institutions thus re-entering together upon the winter term. Each is admirable in its way, but each is distinguished by a peculiar character of curriculum. Carried on latterly in close association with the Royal College of Science, it is natural that the School of Mines at South Kensington should place rather more store upon the abstract than the practical side of its work, and, consequently, it is credited with rather more affection for the pure sciences, in which certainly in the most complete manner the correct industrial methods have their grounding, than for those work-a-day branches of practical knowledge by which gold and coal are actually won out of the earth. Durham, on the other hand, itself the centre of a coal mining industry that makes itself felt to the confines of the Globe, is naturally the focus ground of many influences that make for an actual practical knowledge of mining perhaps more immediately useful so far as actual mining operations are concerned. Each of these special types of teaching has its advantages, and in a sense it may be said that they hardly come into competition with each other. Perfection in theory, and perfection in practice, have each its recommendations, and the harmonious blending of both should be the highest aim of the mining student.

Professor JUDN, in the course of his address to the students of the Royal College of Science, dwelt at considerable length upon the circumstances connected with the foundation of the College, and the incorporation therewith of the Royal School of Mines. The institution, from the scientific point of view, is not the least among the many enduring monuments which will preserve the fame and attest the usefulness of the late Professor HUXLEY. There is, of course, the vexed question as to whether the School of Mines or the Royal College of Science gained the more by association together, but there can be no doubt—the question of endowments and grants apart—that mining practice in this country has gained a good deal by the attainment of a more scientific method. There is, undoubtedly, some ground for complaint as to the stiff and inelastic character of the education with which the mining students of this country are equipped for the after work of their lives; but the complaint lies rather with the obligatory inclusion of many foreign and superfluous subjects in the mining curriculum. It is, moreover, now widely customary for the South Kensington students to spend a brief, but still useful, period underground in the home mining district, and provided they make the best use of their time, there should not be much ground left for subsequent fault-finding. To suppose that a student fresh from the laboratory should be fitted to take the sole control of a large mine would be unreasonable. No amount of class room teaching, or even practical work, can properly supply the place of that large and practical acquaintance with life and affairs which, as in most other walks of life, is an indispensable requisite for a successful career. The most carefully elaborated scheme of education yet devised is but a preliminary to the sterner teaching of actual experience. The common error that the education of a student ceases as soon as he has passed from the lecture room into the world could only gain currency because people are too much in a hurry to examine it. A subject which, like mining, develops special types in different countries, can only be lucidly grasped after years of experience; but much of the value of that experience is lost, unless the mind be prepared by earlier training to appreciate it.

This autumn the Durham College of Science enters upon its 26th session with a record of solid successes in the past, and a crowd of most encouraging anticipations for the future. Like every other institution of its kind, the college is an evolution from useful and unpretentious beginnings—a growth which culminated comparatively a short while ago in the present magnificent building, eminent teaching staff, and vast sphere of work. Were there no other evidence in its favour, the almost unexampled rapidity with which it has developed would alone bespeak the character of its work. Situated in the very heart of a mining district, the institution met a want keenly enough felt in the neighbourhood, and the originators were not slow to see that only by the aid of the best professorial staff to be had, and with the accommodation of a capacious building, could the needs of northern England be adequately met. There is no subject in the lately enlarged curriculum which is in better hands or more adequately treated than mining. Only those who have read the frequent and able contributions from Professor LOUIS' pen on

mining subjects, and are acquainted with the leading facts of an experience that is as varied as it is cosmopolitan, can form a reliable judgment of his fitness to take in hand the education of the young miner. The efficiency and usefulness of the classes under his control are universally acknowledged. It must, moreover, be remembered that his work is carried on with all the advantages of contiguity to a busy coal field. There is, in fact, an almost humorous proximity between class room and mine, and were not the architectural stability of the building so altogether beyond any sort of question, a fanciful imagination might be tempted to suggest the possibility of a sudden disappearance of the grave and learned assembly into the recesses of the earth. The college is literally undermined, a circumstance which renders possible an instant adjournment down a shaft to apply the principles of mining practice so learnedly expounded above. Under such circumstances as this, mining could hardly be other than practically taught, a quality which will certainly make itself felt in the fitness of the students to take personal charge of mining operations when they are out of their noviciate. Encouraged by the past history of the institution, the authorities of the college may confidently anticipate an even larger measure of success in the future.

## LAKE VIEW EAST.

THE statement made by the Chairman at the statutory meeting of the Lake View East Gold Mine was of a very gratifying nature, and the proprietors may fairly safely assume that their money is invested in a mine which, with judicious management, should substantially reward them for their outlay. The property is situated in a district where there are already established several valuable mines, while in regard to the successful working of the lodes, Colonel PARRY NISBET assured the shareholders that a sufficient supply of water would be secured from the Hauman's Water and Ore Reduction Company, and that of timber there was an abundance. Writing in August, Mr. GEORGE GRAY informed the directors that the lode in the crosscut from the No. 2 shaft was found, by fire assay, to be worth 8 ounces. In addition, samples taken from the 18 inches then opened on the hanging wall gave 5 ounce prospects. Mr. GRAY continues—"This is very gratifying, of course, but I do not expect that the lode, when opened, will average anything like this. I shall be perfectly content if it opens and goes as well as the Lake View South. This particular part of the belt is fraught with great possibilities. There are two distinct lode formations in this ground which have proven a little to the north and east to be exceedingly rich and continuous." In a cable dated September 26 Mr. GRAY confirms this opinion, and adds: "The value of the Lake View East has been enhanced by the recent discovery of a fine lode carrying gold milling ore on the Lake View Extended, striking through the heart of Lake View East. We are now sinking on the course of this lode." It is evident from the news received that the mine is being developed in a very thorough and systematic way, and shareholders apparently have no cause for anxiety as to the future of the company.

## GOLDEN LINK AMALGAMATION.

THE fashion of consolidation which has been so much in vogue among the South African companies has penetrated to the West Australian market. The Golden Link consolidation, which is the case in point, gives every promise of being a large and important concern. Up to the present four companies have signified their intention of participating in the scheme, but another company is mentioned as a possible fifth party. The capital of the Golden Link Consolidated is fixed at £550,000, which leaves a margin of £280,000 over what is required to meet the interests already held in the four companies. One advantage of the amalgamation will be a considerable reduction in the capitalisation upon which dividends will have to be earned. The amalgamation will, moreover, start upon its career with cash to the amount of £50,000 in hand, and a complement of machinery valued at £8000. Beyond this there will be the economies, which must be effected by the use of the same office accommodation and the curtailment of other expenses common to all the individual companies. There can be no doubt that in certain cases amalgamation is productive of great benefits over the separation and individualisation of small companies, and in the present instance the shareholders in the different concerns which are parties to the consolidation would seem to be extremely hopeful of the ultimate results of the step which they have decided to take.

## THE REVIVAL IN THE STEEL TRADE.

SOMETHING like a "boom," alike in Bessemer and Siemens or in open-hearth steel manufacture—and, as compared with periods a little anterior, a distinct revival—is demonstrated by the official returns just published of the British Iron and Steel Association of the production of steel in the United Kingdom during the first half of the present year. Though the increase in both these departments in the second half of last year was marked, it is altogether outstripped by the extraordinary development of our steel output as revealed by these latest figures. Broadly speaking, the total of Bessemer and open-hearth combined reaches for the half-year some 2,000,000 tons, or more than 250,000 tons in excess of the total for the corresponding period of last year. This growth of about 12½ per cent. is decidedly gratifying to all who have the welfare of the steel trade at heart, and hardly less to the coal and ironstone mining interests than to producers of the metal in its finished form. In other words, our total steel production is now at the rate of 4,000,000 tons per annum, which is by far the largest production ever made by any European country, though it has been beaten more than once by the United States. For some years metallurgists have watched with interest the race for



supremacy between Bessemer and Siemens steel, and the new returns prove conclusively that the latter is increasing the lead which of late it has attained. The total quantity of Bessemer ingots for the half-year was 905,522 tons as compared with 1,063,798 tons of Siemens ingots. The former production was an increase of as much as 13 per cent. upon the corresponding period of last year; but the improvement of the latter description was even greater, amounting, indeed, to about 20 per cent. It is in the north-east of England that open-hearth steel shows most expansion, the present output there being at the rate of 800,000 tons per annum; and next in order of growth comes Scotland, where the production of this metal is now at the rate of 600,000 tons per annum. The Scotch record for the second half of the year will, probably, be more satisfactory, inasmuch as several new or improved works, such as those of the Glasgow and Calderbank Companies, will have got into fuller swing. The increase in the newer open-hearth steel-making districts, such as Staffordshire, Lincolnshire, &c., is also very noticeable.

### BOARD OF TRADE RETURNS.

We have no reason to feel over gratified with the Board of Trade Returns for the past month, yet we may regard them with some feelings of satisfaction. Considering that the month includes one working day more than in the corresponding period of last year, the increase of £335,140 in the exports is but a modest one. Nevertheless, it is evidence that our foreign trade, in spite of some adverse influences, is well maintained, and in that fact there is much cause for congratulation. We must also bear in mind that we are comparing the figures with an exceptional month, when the exports showed a great expansion. The imports, however, are much more favourable, the advances amounting to £2,492,000, or rather more than 8 per cent. We are now able to compare the figures for the three-quarters of the year, and we find that our export trade has expanded by £13,815,716, and the imports by £12,432,000, a sufficient proof that British trade is not declining, and that there is no ground for the lamentations in which many are too inclined to indulge. We again find that metals and articles manufactured therefrom take the lead, the increase amounting to £300,281, or 12 per cent. The total export of iron and steel during the month amounted to 314,736 tons, as compared with 269,316 in September, 1895, the values being respectively £1,978,784 and £1,709,377. During the nine months we have exported 2,625,543 tons, valued at £17,695,913, against 2,036,003, of a value of £14,227,237. On the other hand, tinplates show a shrinkage of 37 per cent. on the month and 26 per cent. on the nine months. Copper also shows a decline, which is very marked, and extends to sheathing and wrought, as well as the unwrought metal. Altogether, therefore, as we have remarked, though we have no occasion to rejoice, yet we must feel satisfied with the returns, for the month has been affected by unfavourable influences and especially by the depression in the United States.

### INTERNAL COMMUNICATION IN WESTERN AUSTRALIA.

One effect of the gold mining revival in Western Australia has been to emphasise the necessity of improving in no considerable degree the harbour accommodation at Fremantle. From all accounts it appears obvious that the unexpected volume of business which owed its origin to the gold industry found the harbour works at the chief port of entry very much lower in point of efficiency and accommodation than might have been wished, and when to this was added a vast congestion of transport traffic on the few lines of railway which the colony already possessed, and the tedious and costly character of the road transport from the railway limit to the far-off gold districts, it will be seen that the mining industry, at the outset of its rejuvenated career, had one or two ugly obstacles to overcome. No blame can justly be accorded to anyone for this, since the sudden and wonderful expansion of the gold mining industry was quite beyond the prophetic range of even the keenest introspective vision. It has, moreover, to be added to the credit of the Government that they have not been at all tardy in their endeavours to cope with and remove the insufficiency of internal communication which has so far seriously hampered gold mining. When the different colonial towns and districts have finished their light-hearted squabbles as to routes and termini there is reason to suppose that Western Australia will be in possession of a railway system almost commensurate with her needs, and which in this world of imperfection will approach the limit of reasonable expectation. In the same way it appears that considerable harbour improvements are now in progress at Fremantle, so that all delays which might follow upon traffic congestion at that port may be removed.

### NEW ISSUE.

#### PEABODY AND BERKSHIRE GOLD MINES (LIMITED).

This company has been formed with a capital of £100,000, of which 40,000 shares are now offered for subscription, for the purpose of acquiring two gold mining properties, the one known as Peabody having an extent of about 50 acres, and the other the northern half of Berkshire, about 15 acres, adjoining, with all rights, claims, mill site, and water rights. The prospectus states that "the properties are advantageously situated, being within about 2½ miles of a railway-station, and 200 miles from Melbourne, and according to the reports there is an ample supply of water and timber for all milling and mining operations. The Peabody Mine has been thoroughly well proved, having been worked on a small scale since 1861. Since 1893 a considerable amount of work has been done, a tunnel having been driven 637 feet, which has cut the reefs worked in the upper levels. In the course of developments small quantities of ore have been collected, and nine crushings made, in all about 445 tons, which yielded 726 ounces of gold, and realised over £4 per ounce, the last crushing showing about 2 ounces to the ton. It is believed that the reefs already found on the Peabody will run into the Berkshire."

## THE MINING MARKET.

FRIDAY EVENING.

A week of nervous excitement, with wide fluctuations in Kaffirs.—The position uncertain pending the disclosures of the Settlement.

IN writing last week, we stated that it was extremely difficult to forecast the course of prices in the Mining Market, and that until the political uncertainty was relieved it was hopeless to expect any marked improvement. So far as the uncertainty is concerned it has reappeared on pretty well every day of the intervening period, which has been characterised by much nervous tension and some wide and excited movements. The net differences on balance at the close are not in themselves extensive, but they represent the results of transactions, in many cases fraught with grave importance. At the present time the position is more difficult to gauge than it has been at any previous juncture. There has been an enormous amount of selling, and until the Account is arranged we are left in the dark as to whether the sales have been for delivery of real stock, or are on account of speculators for the fall. Again we have to learn whether the stock has passed into strong hands or the reverse, and whether the heavy differences which will have to be met will bring down operators of any importance. During the week rumour has been busy with the most preposterous suggestions, reflecting upon the credit of all the most unlikely men. There is nothing new in this phase of a bear campaign, and it is only too probable that history will repeat itself by the complete disproof of nine-tenths of the canards that have been in the air. These points, however, cannot be set at rest until the account day has come and gone, and in the meantime the markets are so sensitive as to move in an exaggerated way at the first appearance of a big dealer.

On Saturday morning the Kaffir Market opened flat on a pressure of sales from France, the stock particularly attacked being East Rands. There was hardly an exception to the fall which, however, was most marked in those stocks dealt in on the Bourse. West Australians held their own tolerably well, and New Zealanders were well supported. On Monday, Paris sales again depressed the African Market, and the bear brigade on this side joined in with a will, with the result that a general fall was established. West Australians were dull, and there was nothing very cheerful about the Miscellaneous department. Tuesday was a miserably wet day, and everything appeared to work in favour of the bears, who were in control throughout the day in all departments. The Paris Bourse was closed in honour of the Czar's visit, but it was evident that liquidations on an extensive scale were in progress in this market on French account. On Wednesday, amid an incessant downpour of rain, the bear raid made further progress, assisted by some heavy sales of real stock. During the last hour of business a sharp change occurred, stories being circulated to the effect that strong combinations had been formed to check any further fall. This was the signal for a stampede among the bears, and prices of South Africans rose excitedly, the greater part of the previous losses being recovered. On Thursday the advance made further progress during the earlier dealings, but by noon a halt was called, and after an hour or so of hesitancy prices broke away again, reaching their lowest about 3 o'clock. There was a slight reaction before the close, and Kaffirs opened better again to-day. There was a spasm of flatness about midday, but at the close a general recovery is seen. There has also been a fair amount of quiet buying in the West Australian market, on account of investors who are averaging. Copper shares have been good, and altogether the market has a more cheerful appearance. To-morrow will be a non dies, and the making up for the mid-October Settlement will commence on Monday.

#### South Africans.

The pivots upon which the Kaffir Circus has turned this week, have been East Rand and Consolidated Gold Fields. The former have been pressed for sale from France to liquidate the account of a large operator whose difficulties have necessitated the intervention of influential capitalists. Discouragement has also been intensified amongst holders by the discovery that the capital will have to be increased to provide funds for further developments, whilst the proposal to extinguish the vendor's interest has not been favourably received. Goldfields have fluctuated extensively under the influence of unconfirmed rumours to the effect that the next dividend will be passed. At the same time, the heavy fall in Goldfields Deep gave colour to all the old pessimistic utterances to the disparagement of Deep level mining generally, to which the Consolidated Company is so extensively pledged. The rally which was brought about on Wednesday afternoon owed its start to the report that two or three of the big South African houses were laying their heads together to support the market, and although little open buying has as yet taken place, it is understood that several large lines of stock have been taken over privately so as to prevent a further breaking of the market. Chartered have attracted comparatively little attention and close with a net loss of ½ at 2½. Gold Fields, which we left at 12, changed hands at 10½ during the worst of the slump on Wednesday. They close to-night at 11½, with Gold Trusts only ½ down at 7½, after being nearly a point lower. Gold Fields Deep broke from over 10 on Saturday to 7½ on Wednesday closing just midway at 8½. East Rands are finally ½ down at 6½, having touched 5½ at their worst. Anglo-French are sympathetically ½ lower at 4, whilst in the majority of Land and Exploration Companies changes are more or less nominal, actual business having been on a small scale. Rhodesia Exploring has fallen ½ to 5, Mashonaland Agency ½ to 1½, New African ½ to 2½, Zambesi ½ to 2½, Willoughby Consols ½ to 1½, Henderson's ½ to 2½, and others ½ or so. The Barnato Group is generally lower, though closing above the worst. Johnnies Investments leave off ½ down at 3½, after touching 2½. This looks badly for the new issue, which Messrs. Barnato Brothers have guaranteed at 3½. Barnato Banks are ½ down at 1½, as are the Consols at 2½. Buffels have lost ½ at 2½, and declines of ½ are seen in Ginaberg at 2½, Glencairn at 2½, Kimberley Roodeport at 2½, New Primrose at 5, and Spes Bona at 1½. In the Robinson group, the Banks have lost ½ at 5½, Randfontein ½ at 2½, Randfontein North ½ at 1½, Lynglaagte ½ at 5, and Block B ½ at 1½. Deep Levels have all been affected by the weakness of Goldfields Deep. Rand Mines were no better than 2½ on Thursday, but they have rallied to-day to 26½, which is 2 points below last week's price. The Goldenhuis Deep return published on Thursday although it shows a slight increase in actual yield, was voted unsatisfactory because the profit for the month was only £1250. The shares close above the worst, half a point down at 4½. At the same figure Nourse Deeps show a loss of ½, as do Champ d'Or Deep at 1½, Consolidated Deeps at 5, Comets at 2½, and Roodeport Deep at 2. The total output from the Rand for September has not yet been announced, but the individual returns from many of the outcrop companies have been regarded as

disappointing, on which account the leading dividend payers of the Eckstein Group have suffered in a rather marked manner. Jumpers have fallen ½ to 5½, Nigel ½ to 2½, Simmer and Jack 1 to 5½, Jubilee ½ to 8½, Ferreira ½ to 19, Village Main ½ to 5½, City and Suburban ½ to 4½, Henry Nourse ½ to 4½, Heriot ½ to 8½, and Goldenhuis ½ to 3½. Modderfontein sustained a heavy fall in the middle of the week, one of two big lines of shares being put upon the market. From over 6 the shares were depressed to 4½, but they have rallied to-day to 5½. Durban-Roodeport are actually ½ higher on the week at 6½, but Knight's have been very flat, closing ½ down at 5½. Meyer and Charlton have declined ½ to 5½, Bantje ½ to 2½, Crown Reef ½ to 10½, Robinson ½ to 8½, Transvaal Gold ½ to 6½, Volgelstruis ½ to 4, Wolfontein ½ to 5½, and Worcester ½ to 4½. One of the few stocks that held its own is Van Ryn ½ higher at 5½. The small Lydenburg shares are generally a few pence easier, but Spitzkoppe have suffered from realisations in Paris, closing well above the week, but still ½ down at 28½. Jagers have lost ½ at 9.

#### West Australians.

A good deal of disorganisation has been evident in this department during the week, and all manner of rumours have been rife as to the difficulties of individuals and companies. Although during the semi-panic it was difficult to get prices made at all, there has since been a fair amount of quiet buying. Mr. Horatio Bottomley and his friends appear to be organising support for the Associated Group, and in one or two other sections of the market there is a reassuring firmness. Prices have now reached a level at which purchases involve comparatively small risk, provided that proper selection be made of the shares laid in. There are any number of bears about, and it is quite on the cards that a smart rally may come off within a very short time. Associated have lost ½ at 2½, Associated Southern ½ at 1½, Lake View South ½ at 4, and W.A. Joint Stock Trust ½ at 3½ premium. Great Boulders dropped to 6½, closing ½ down at 6½, and Hannan's Brownhill are above the worst at 4½. North Boulders have been further depressed on unfavourable estimates of the crumpling, but they close only slightly worse at 7. Iron Kings have lost ½ at 1½, Golden Horseshoe ½ at 1½, Oroya ½ at 1½, Hannan's Star ½ at 1½, Lady Loch ½ at 1½, and Lake View ½ at 1½. The most sensational fall is in Hannan's Reward which at 1½ show a loss of 40 per cent. upon last week's quotation. The amalgamation scheme has depreciated Golden Links ½ to 1½. In the Menzies Group, Mining is ½ better at ½, whilst some of the are seen Gold Estates at ½, O'Driscoll at ½, Menzies Reef at ½, and Florence at ½. Lady Shenton are ½ down at 2. The White Feather Group is distinctly harder—White Feathers at 2, Wealth of Nations at 1½, and Hit or Miss at 1½. Ramage Syndicates have lost ½ at 2½, and Black Flags are ½ down at 1½, Share Corporation are ½ lower at ½ premium. Gold Fields have lost ½ at 6½, Mainland Plains ½ at 3½, and Mainland Consols ½ at 2½. A special feature to-day is a fall in Colonial Finance which are down ½ at 2½. London and Globe Finance, on the other hand, has been conspicuously strong, closing ½ up at 4½, whilst the deferred shares are up to 6½. The special settlement in West Australian (Gold District) Trading Corporation took place on Thursday, and some strong stories are afloat as to the vagaries of one of the chief operators. The ordinary shares, which were over £2 last month, fell to 12s. 6d. on Wednesday, but have since rallied to 1½, whilst the founders' shares, after falling from 90 to 40, leave off about 70.

#### Miscellaneous.

The declaration of an 18s. dividend on Rio Tinto came out at the wrong time to have its full effect. Under more favourable conditions Copper Shares would doubtless have gone ahead. As it is, Tintos are ½ lower on balance at 24½, with Ansonia ½ down at 6½. Capes at 2½, Libbia at 2½, Mason and Berry at 3, and Tharsis at 5½ are all well maintained. Broken Hill Prospects have lost ½ at 2½, as have British at ½. Mount Lyell are ½ better at 8½. Worthen's have declined ½ to ½, and Aladdin's are a like fraction lower at 2½. Indians are generally easier having attracted less attention than usual. Losses not exceeding ½ are shown in Champion Reef at 7½, Mysore at 8½, Nundydoo at 3½, Oregum at 2½, Coromandel at 2½, and Oregum Prof. at 3½. New Zealanders have been fairly steady, Taitapu at 3, and Silverton at 2½, being actually higher, whilst Waihi at 6½, and Waitkari at 4½ are only ½ down. Charters Towers Varieties are dull, Day Dawn Blocks being back to 11s. 6d., and Bonnie Dundee to 7s. Golden Feathers have receded to ½. The British Columbian boom is in complete abeyance, but encouraging reports continue to reach this side, and it is tolerably certain that with a clearance of the financial atmosphere we shall hear a good deal more of this coming centre.

#### STOCK EXCHANGE SETTLING DAYS.

##### CONSOLS.

Thursday, November 5.

MINING MAKING-UP DAYS:

Monday, October 12. | Monday, October 25.

MINING NAME DAYS:

Tuesday, October 13. | Tuesday, October 27.

ACCOUNT DAYS:

Thursday, October 15. | Thursday, October 29.

**ELECTRIC PUMPING PLANT FOR COLLIERIES.**—The Australian Coal Company have contracted with Messrs. Ernest Scott and Mount (Limited) for the supply of an electric pumping plant for their colliery of considerable size. The generating machinery consists of two horizontal engines, with Corliss triple expansion gear, each capable of 300 brake horse-power. Two continuous current dynamos are driven by ropes, each machine giving an output of 200,000 watts, at an E.M.F. of 625 volts. The current from the dynamo is taken to a distributing switchboard in the engine room, the switchboard connecting with two pairs of main cables, which run down the shaft to the terminal box at the pit bottom. The object of placing four cables in the shaft is to prevent any possibility of breakdown through the cables being accidentally damaged, as any pair of cables can, in case of emergency, carry sufficient current to enable the plant to run without stoppage. Underground there are four sets of three-throw pumps of this firm's improved type, one pump delivering 600 gallons of water per minute against a head of 270 feet, along a road to a sump at the bottom of the shaft, about 1200 yards away. At this sump a second pump of the same size—viz., to deliver 600 gallons per minute—is placed, and forces to bank against a head of 690 feet. Two dip pumps are being provided at present, each delivering 100 gallons per minute against a head of 450 feet; but at a future date two additional sets of pumps will be provided.

**ARE CORNISH EXPERTS WANTED ABROAD?**—The interview which we published last week, under this heading, with Mr. W. Thomas, C.E., was erroneously attributed to the Cornishman, it should have been the Cornish Post.

The books of Westralia (Limited), 54, 1d, Broad-street, G.O. will be closed on Wednesday, October 14.



Address by the Dean.

THE Broken Hill Proprietary Block 10 Company (Limited) has opened a London office and register at Finabury House, Blomfield-street, N.C., Mr. F. L. Cox and Mr. T. Pyke have been appointed London directors, and Mr. Edwin Mahben, London secretary of the company.



INDIAN AND ASIATIC MINES.										
Malaghat Mysore G	2 2/3	2 9/16	2 3/4	2 9/16	1 C	—	1 0 0	160,000	India	6-7, Queen-street
Burma Ruby	1 1/16	1 1/16	1 1/16	1 1/16	1 0	—	0 13 0	293,370	Burma	Bank House &c.
Thompson Reef	7 3/4	7 3/4	7 3/4	8 3/4	1 0	4/6 Aug. 13 '01	1 0 0	211,645	India	6-7, Queen-street
Central	1/	1 3/6	1/	1 3/6	1 0	—	1 0 0	200,000	"	Darbhanga Ho. &c.
Poromandel	1 1/16	1 1/16	2 3/4	2 3/4	1 0	—	1 0 0	120,000	"	6-7, Queen-street
Sold Fids Mysore G	7 1/16	7 1/16	11 3/4	1 1/4	1 0	1/- July '92	1 0 0	220,000	"	6-7, Queen-street
Gold Mysore	1 3/16	1 3/16	—	—	5/	—	0 5 0	424,000	"	Copthall House &c.
Temple Ghat Mysore	0	0	1/6	2/	5/	—	0 4 0	275,711	India	6-7, Queen-street
"	8 3/4	8 3/4	8 3/4	8 3/4	1 0	6/ June 28 '9	1 0 0	248,334	"	6-7, Queen-street
"	—	—	1/6	1/	1 0	—	0 18 6	100,007	"	13, Copthall Ave &c.
"	8/	9/	8/	9/	1 0	—	0 19 6	160,000	"	6-7, Queen-street
"	13 1/16	13 1/16	13 1/16	13 1/16	1 0	ris. Jan. 18 '95	0 19 6	127,400	"	13, Copthall Ave &c.
"	5 3/4	5 3/4	3 3/4	3 3/4	1 0	ris. Jan. 18 '96	0 19 6	125,000	"	13, Copthall Ave &c.
"	6/	8/6	7/	7/6	10/	—	0 3 8	250,000	"	6-7, Queen-street
"	13 1/16	13 1/16	39 3/16	3 1/16	1 0	2/- June 28 '96	1 0 0	200,000	"	—
"	2 3/4	2 3/4	3 3/4	3 3/4	1 0	1/7 July '96	0 9 0	145,000	"	—
"	2 3/4	2 3/4	3 3/4	3 3/4	1 0	4/ July 15 '96	1 0 0	107,011	"	—
"	2 3/4	2 3/4	3 3/4	3 3/4	1 0	4/ July 15 '96	0 5 0	12,389	"	—
"	1 1/4	1 1/4	1 1/4	1 1/4	1 0	—	1 0 0	200,000	Malay Pn.	4a, Teluk's &c.
"	4/	10/	5/	10/	—	—	0 5 0	167,491	Mysore	6-7 Queen-street
"	1/	1 3/6	1/	1 3/6	4/	—	0 5 0	167,491	Mysore	6-7 Queen-street



Anglo-Chilian F.N	8½	8½	8½	8½	10 0	7/0 Feb. 27 '96	10 0 0	35,000	Antofagat.	123, Bishops-st. W
" 6% RydstMB	91	96	94	96	100 0	6½ July 1 '96	100 0 0	2100,000	"	"
Argen. Concessions	13	10	13	10	2/	—	0 2 0	150,000	S. Luis ...	3 & 5, Queen Street.
Caylloma.....S	1½	1½	¾	1	2 0	1/- Apr. '94	2 0 0	125,000	Peru .....	52, Leadenhall street
Colorado Nit. ....N	¾	1	¾	1	5 0	2/6 Dec. 16 '95	5 0 0	32,000	Chili .....	17, King-st., Liverp
Colombian Hy....G	¾	¾	¾	¾	1 0	1/- Jy 26, '95	1 0 0	75,000	Colombia	16, Blomfield-street
Coplapo.....C	2½	2½	2½	2½	2 0	1/ May 29, '96	2 0 0	100,000	Chili .....	Dashwood House, E.C
Darien "A".....G	6	6¼	6¼	6¼	1 0	—	1 0 0	40,553	Colombia	Manchester.
" "B".....G	7½	7½	7	7½	1 0	1.uwApr 29'96	1 0 0	30,000	"	"
El Callao.....G	¾	¾	¾	¾	5 0	9¼d. Feb. '94	5 0 0	257,000	Venezuela	2, Bishopsgt.-st., Wn
Frontino & B....G	1½	1½	1½	1½	1 0	9d. July 15 '96	1 0 0	128,662	Colombia	184, Gresham House
Glenrock.....G	1/	1/8	1/3	1/8	1 0	—	1 0 0	192,948	Arg. (& I.)	3-5, Queen-street, E.C
Guadalupe.....GS	—	—	3/8	5/	1 0	—	1 0 0	180,000	Honduras	14, Union st., Old Brd
Java'l.....G	1/8	1/6	1/8	2/6	2/-	—	0 2 0	105,269	Nicaragua	139, Cannon-street.
Lagunas.....N	1½	2¼	2¼	2¼	3 0	15p.c. Dec. '94	3 0 0	120,000	Tarapaca	3, Gracechurch st;
Lautaro.....N	5½	6	5½	6	3 0	5/- June 26 '95	3 0 0	110,000	Obili .....	79, " "
Liverpool.....N	7¾	8½	7¾	8½	5 0	15/- May 1, '96	5 0 0	22,000	"	Liverpool.
London Nit.....N	2	2½	2	2½	3 0	3/4½ Nov. '85	3 0 0	10,000	"	9, Gracechurch-st.
" Nit. (Fre.L)	3½	4	3½	4	5 0	8½ Nov. 28'95	5 0 0	22,000	"	"
New Julita.....N	—	—	—	—	—	—	1 10 0	—	"	"
" Tamaragal N	1½	1½	1½	1½	1 10	1s. Dec. '94	1 10 0	130,000	Tarapaca	50, Lime-street, E.C
" 8½ Cam Pref	1½	1½	1½	1½	1 10	8 p.c. Feb. '95	1 10 0	130,300	"	"
" 6 p.c. Debs ...	1½	62	73	62	100 0	6 p.c. Feb. '96	100 0 0	2660,000	"	"
Orita.....G	—	—	1/8	1/6	1 0	1/- April '99	1 0 0	30,000	Colombia	16, Blomfield-street
Ouro Preto.....G	—	—	—	—	1 0	1/- Feb. '98	1 0 0	80,000	Brazil.....	6, Queen-street-place
Pao. & Jazpampa N	¾	1	¾	1	5 0	4/- May, '95	5 0 0	72,000	Tarapaca	3, Gracechurch-st.
Phoenix.....	1/-	1/6	1/6	1/-	10 0	—	0 8 0	400,000	S. Luis ...	3 & 5, Queen Street.
Rosario.....N	4¾	5¾	4¾	5¾	6 0	3/- Aug. 13 '96	5 0 0	120,000	Chili .....	7½ Old Broad-stree
" Ha'r Db Serp	102	105 kd	102	105 kd	100 0	5½ Oct. 1 '96	100 0 0	475,000	"	"
"	103	106	103	116	100 0	5½ July 1 '96	100 0 0	4200,000	"	"
St. John del Rey G	¾	¾	¾	¾	1 0	4/8 Nov. 19 '95	1 0 0	327,550	Brazil .....	Finaby Ho., Blm'd st
San Donato.....N	¾	1½	¾	1½	5 0	2/8 May 24 '95	5 0 0	32,400	Chili .....	12, King-st., Liverp
" Jorge.....N	1½	1½	1½	1½	5 0	7/8 May, '96	5 0 0	75,000	"	9, Gracechurch-st
" Pablo.....N	1½	1½	1½	1½	5 0	5/- Oct. 30 '95	5 0 0	39,000	"	"
" Sebastian.....N	¾	1½	¾	1	5 0	4/ July 15 '96	5 0 0	29,000	"	Dashwood House E.C
Santa Barbara.....G	¾	¾	¾	¾	10/	1/3 Dec. '88	0 10 0	60,000	Brazil.....	Liverpool
" Elena.....N	¾	¾	¾	¾	5 0	5/- Nov. 15 '94	5 0 0	22,000	Tarapaca	1, Gracechurch-st.
" Rita.....N	¾	¾	¾	¾	5 0	10/ May 29 '96	5 0 0	27,000	Chili .....	Dashwood House, E.C
Tollima "A".....S	5¼	5¼	4¾	5¼	5 0	8/- Mar. 12 '96	5 0 0	14,000	"	2, Finsbury-circus
" "B".....S	4	4½	3½	4½	5 0	5/- Mar 12 '96	5 0 0	8,000	"	"



## REPORTS FROM THE MINES.

BRITISH MINES.

Figure 1



## STOCK MARKETS



The directors of the DE LAMAR MINING COMPANY (LIMITED) have declared an interim dividend for the half-year ending September 30 of 1s. per share (free of income-tax) payable on the 31st inst. to all shareholders registered on the company's books on the 6th inst.

The dividend warrants in respect of the interim dividend of 15 per cent., declared on September 18, payable to all shareholders of the ANGLO-FRENCH EXPLORATION COMPANY (LIMITED) registered on the 30th ult., were forwarded by post to the respective holders on the 6th inst.



making the total distance from your 100 feet level 25 feet less than you thought it was," says HANNAN'S LODGE. The following report, dated August 19, has been received from the company's managers, Messrs. J. C. McCallister and Co.: "The ground here is good ore—During the fortnight No. 3 consumed a total distance of 46 feet. The process consists of decomposing oxidized schist with branches of quartz which appear to be converging underfoot. The driving is terribly tough and expensive, and headway can only be made by continual small charges of explosives. It can still be obtained by panning, although the cost of the settled country at the upper level, it is still apparent that the No. 3 shaft has been reached yet. When the No. 3 shaft reaches the level it is believed connected with the water level located at the 100 feet level it will have sunk to continue the sinking of No. 1 shaft. No. 3 shaft has been driven to a further depth of 21 feet, making a total depth of 79 feet. The country consists of tuffaceous schist, is very tight, and being intermixed with conglomerate veins, timbering sets are necessary at short intervals. During the fortnight No. 2 shaft has been discontinued in order to concentrate labour on No. 3. This is advisable in order to push forward completion of the project before the winter sets in. It is the same time the scheme of prospecting on a scale of 1367 ft depends in great measure on developments on 1362 ft. The incline are more easily traceable from that lease,—Connolly.

[illegible]



INDIAN.



**M**ESSRS. HARRINGTON AND Co's Copper Report, dated Liverpool, October 1st, contains the following:—Chill charters for the second half of September advised as 850 tons, against 1300 tons for the previous fortnight, making 650 tons for the month. The total since December 31 last is 18,040 tons, and the quantity same time last year was 18,550 tons. Exchange 174d. Since our last issue the quantity of G.M.B.'s that have changed hands has been very small, about 6000 tons. Fluctuations have been very slight, viz., cash having sold at £47 19s. to £47 18s. 9d., and three months at £47 15s. to £46 13s. 3d. The advance in the Bank rate to 3 per cent. on 24th inst. has greatly discounted, and had no effect upon the market, which continues to hang on the same terms from 3 months from 30s. 5d. to 5s., and which so far does not seem to have met with success. There has been a total absence of speculation, and operators seem to have been pursuing a wary policy in the expectation of seeing matters both political and financial become more settled. The American situation shows a general tendency to improvement, and with better reports coming from the Continent, and our own countrymen, we hope to see more activity and a change for the better all round. Market closes firm to-day at £47 16s. 3d. cash, and £48 for three months, rubber buyers close firm to-day at £47 16s. 3d. cash, and £48 for three months, London, and Harro are 30s. 58B tons, against 31,569 tons on the 16th ult., showing a decrease of 619 tons for the fortnight, but with an increase for the previous fortnight of 545 tons makes an increase for the month of 65 tons. The stocks include about 400 tons of copper sold, but not yet delivered to smelters. The visible supply of the fortnight is 34,319 tons, against 35,367 tons on the 16th ult., showing a reduction of 1223 tons. The month's figures show a decrease of 1267 tons from 35,367 to 34,100 of 1223 tons. The month's figures show a decrease of 1267 tons from 35,367 to 34,100 of 1223 tons. The month's figures show a decrease of 1267 tons from 35,367 to 34,100 of 1223 tons. The month's figures show a decrease of 1267 tons from 35,367 to 34,100 of 1223 tons.



## BOARD OF TRADE RETURNS.

## SEPTEMBER TABULAR STATEMENT.

Specially compiled for "The Mining Journal" from the Board of Trade Returns.

THE Returns show that the Imports amounted to £33,111,156, an increase of £2,492,302, and that the Exports totalled £19,797,090, an increase of £335,140, compared with the corresponding month last year. For the nine months ended September 30 the Imports were £216,368,471, an increase of £17,432,737, and the Exports £181,436,153, an increase of £13,815,716 compared with the corresponding period of 1895. The Exports of Foreign and Colonial Merchandise show a decrease of £606,325 for the month, and £5,464,567 for the nine months, the totals being £23,391,511 and £41,714,276 for the one and nine months respectively.

## EXPORTS—SUMMARY OF INCREASES AND DECREASES.

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	INCREASE.	DECREASE.	INCREASE.	DECREASE.
Raw Materials:				
Coal and Patent Fuel ... Tons	—	66,959	£	100,161
Coal, &c., shipped for steamers' use ... Tons	34,582	—	—	—
Metals:				
Brass, and manufactures of	732	—	8,590	—
Copper, unwrought and wrought ... Cwts.	—	41,347	—	86,871
Hardware and cutlery ... £	—	—	11,111	—
Impurities and tools, and parts thereof ... £	—	—	13,730	—
Iron, unwrought and wrought ... Tons	45,390	—	269,437	—
Lead, pig, rolled, &c. ... Tons	1,000	—	12,699	—
Plate, and plated gilt wares &c. ... £	—	—	6,635	—
Telegraph wires, &c. ... £	—	—	31,085	—
Tin, unwrought ... Cwts.	4,215	—	11,497	—
Zinc or Spelter ... Tons	3,373	—	3,475	—
Other Articles ... £	—	—	21,003	—
Total ...	—	—	387,152	86,871
Machinery:				
Steam engines ...	—	—	67,183	—
Other descriptions ...	—	—	71,019	—
Total ...	—	—	138,202	—
Alkali ... Cwts.	—	137,742	—	26,406
Cement ... Tons	—	2,129	—	5,694
Products of Coal ... £	—	—	14,945	—

## EXPORTS—BRITISH AND IRISH PRODUCE.

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	Month ended Sep. 30.	Month ended Sep. 30.	1895.	1896.
Metals and Articles Manufactured therefrom (except Machinery):				
Brass, and Manufactures of, not being Ordnance ...	8,548	9,280	24,402	40,992
Copper: Unwrought, in Ingots, Cakes, or Slabs, and Precipitates:				
To Germany ...	12,570	7,835	29,678	19,070
"Holland ...	10,905	4,882	26,234	12,566
"Belgium ...	1,764	2,274	3,533	5,511
"France ...	10,988	4,265	27,091	10,947
"Italy ...	3,311	1,003	8,554	2,541
"British East Indies ...	—	—	189	289
"Other countries ...	23,483	12,683	48,577	31,225
Total ...	60,106	33,049	144,761	81,919
Wrought, or Manufactures, unenumerated:				
To Sweden and Norway ...	1,510	1,339	4,571	4,538
"Germany ...	124	510	321	2,077
"Turkey ...	2,124	2,258	6,725	6,524
"Egypt ...	1,960	2,296	5,059	5,780
"Brazil ...	2,614	1,709	7,954	5,212
"British East Indies ...	6,992	2,427	24,878	7,122
"Australasia ...	782	1,126	2,185	3,789
"Other countries ...	7,010	7,313	21,159	23,380
Total ...	25,196	18,978	70,133	58,619
Mixed or Yellow Metal:				
To China and Hong Kong ...	382	883	980	2,165
"British East Indies ...	18,175	8,314	37,587	19,557
"Other countries ...	5,834	7,302	13,754	18,658
Total ...	24,371	16,299	52,325	39,780
Total of Copper ...	109,673	66,326	267,119	180,318

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	Month ended Sep. 30.	Month ended Sep. 30.	1895.	1896.
Hardware and Cutlery ...	—	—	184,666	17,771
Implement and Tools, and parts thereof ...	—	—	104,463	118,192
Iron and Steel: Pig Iron:				
To Russia ...	18,587	9,083	49,518	24,837
"Sweden and Norway ...	2,909	3,213	6,440	7,216
"Denmark ...	1,452	1,658	3,523	3,361
"Germany ...	23,424	53,418	48,496	107,718
"Holland ...	9,954	17,775	24,162	39,154
"Belgium ...	1,826	9,039	4,986	26,534
"France ...	2,188	4,539	6,941	8,945
"Portugal, Azores, & Madeira ...	140	120	318	368
"Spain and Canaries ...	311	233	624	1,441
"Italy ...	6,049	13,568	13,363	27,499
"United States ...	5,878	1,622	33,301	7,521
"Australasia ...	2,674	1,171	6,173	3,059
"British North America ...	1,753	1,095	5,502	3,838
"Other countries ...	10,920	7,446	24,424	18,498
Total ...	87,758	122,950	224,550	280,520

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	Month ended Sep. 30.	Month ended Sep. 30.	1895.	1896.
Bar, angle, bolt, and rod	11,312	17,117	66,141	107,040
Railroad of all sorts	8,013	40,622	197,057	198,535
Wire, iron and steel &c.	4,078	5,691	62,898	82,630
Hoops, plates, boiler plates, &c.	3,779	11,692	65,591	87,775
Galvanized sheets	15,690	19,571	174,338	228,771
Cast and wrought iron, &c.	15,674	30,672	399,161	394,552
Old, for re-manufacture	10,048	11,165	27,978	25,779
Steel, unwrought	22,691	25,987	181,859	217,355
Black plates for tinning	2,684	5,660	26,105	54,226
Manufactures of steel, or of iron and steel combined	1,695	4,941	48,206	93,149
Total of iron and steel (including tin plates and sheets) ...	169,346	314,736	1,709,377	1,978,784
Tin Plates and Sheets:				
To Russia ...	2,643	2,637	31,754	31,683
"Germany ...	237	889	4,330	11,580
"Holland ...	501	759	6,417	9,978
"France ...	697	759	8,421	9,265
"Portugal, Azores, and Madeira ...	730	344	8,667	3,948
"Italy ...	272	119	2,419	1,383
"Roumania ...	367	335	4,154	3,738
"United States ...	17,507	7,167	102,808	80,758
"Brazil ...	433	474	4,084	4,163
"Argentina Republic ...	257	467	2,763	5,328
"British East Indies ...	1,007	1,254	11,024	14,758
"Australasia ...	1,369	806	16,656	8,501
"British North America ...	1,203	650	33,211	6,421
"Other countries ...	1,565	1,608	16,345	17,972
Total ...	28,888	18,368	335,333	210,452

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	Month ended Sep. 30.	Month ended Sep. 30.	1895.	1896.
Lead: Pig Sheet, Piping, and Manufactures:				
To Russia ...	607	2,015	8,845	33,456
"Germany ...	142	26	1,560	315
"China and Hong Kong ...	203	46	2,363	567
"Japan ...	78	86	641	1,123
"United States ...	301	11	3,427	140
"British East Indies ...	433	828	6,608	7,098
"Australasia ...	81	734	1,388	1,882
"British North America ...	224	86	2,536	1,015
"Other countries ...	681	940	8,240	10,881
Total ...	2,730	8,730	33,162	45,851

## BRITISH AND IRISH PRODUCE—Continued.

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	Month ended Sep. 30.	Month ended Sep. 30.	1895.	1896.
Plate and Plated & Gilt Wares:				
Telegraphic Wires, & apparatus connected therewith ...	—	—	32,420	39,655
Tin, Unwrought:				
To Russia ...	1,992	4,512	6,872	14,298
"Sweden and Norway ...	342	593	1,144	2,205
"Germany ...	425	567	1,430	1,741
"France ...	1,030	1,317	3,478	4,180
"Turkey ...	291	752	1,037	2,444
"United States ...	103	—	1,944	—
"British North America ...	551	137	1,944	419
"Other countries ...	3,699	4,078	10,651	13,011
Total ...	7,233	12,48	26,799	38,256

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	Month ended Sep. 30.	Month ended Sep. 30.	1895.	1896.
Zinc or Spelter: Unwrought and Wrought ...	12,204	15,574	8,450	11,925
Total of Principal Articles ...	—	—	2,426,175	2,705,477
Other Articles ...	—	—	53,918	74,921
Total of Metals and Articles Manufactured therefrom (except Machinery) ...	—	—	2,480,097	2,780,378
Alkali ... Tons.	519,083	381,326	126,960	100,54
Cement ... Tons.	37,047	34,893	6,060	55,276
Products of coal (including paraffin, petroleum, &c.) ...	—	—	14,126	118,971

## MACHINERY.

PRINCIPAL ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Sep. 30.	Month ended Sep. 30.	1895.	1896.
Mining: (Not Steam Engines.)				
To Countries in Europe ...	2,182	2,470	411,911	243,420
"United States ...	1,586	—	3,508	1,189
"Countries in South America ...	351	5,490	17,880	32,532
"British Possessions in S. Africa ...	48,538	48,538	334,078	437,248
"East Indies ...	8,853	3,461	30,925	43,279
"Australasia ...	4,814	8,123	51,172	255,944
"Other Countries ...	3,479	9,159	35,871	43,390
Total ...	66,442	79,395	487,345	788,000
Total of Machinery other than Steam Engines ...	1,011,525	1,032,544	8,994,493	10,026,213
Total of Steam Engines ...	212,736	279,919	1,980,466	2,147,424
Total of Machinery and Mill Work ...	1,224,261	1,312,463	10,974,959	12,173,637

## EXPORTS OF FOREIGN AND COLONIAL MERCHANDISE.

PRINCIPAL ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Sep. 30.	Month ended Sep. 30.	1895.	1896.
Copper:				
Unwrought and part wrought	1,289	563	57,794	27,674
Iron and Steel:				
Bar, angle, bolt, and rod	2,167	1,575	16,114	11,468
Steel, unwrought	714	29	5,594	352
Manufactures:				
Girders, beams, and pillars	192	213	984	1,456
Unenumerated ... Cwts.	55,626	70,563	68,583	80,556
Petroleum ...	77,800	111,500	2,862	3,858
Quicksilver ...	—	—	24,007	21,638
Saltpetre ...	2,033	1,244	1,894	917
Tin, in blocks, ingots, bars, or slabs ...	29,447	26,017	94,000	78,312

## IMPORTS.

## SUMMARY OF INCREASES AND DECREASES.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Increase.	Decrease.	Increase.	Decrease.
Metals:				
COPPER: Ore ... Tons	1,746	—	£	12,677
Regulus ...	—	507	—	24,734
Unwrought and part wrought ...	2,440	—	129,875	—
IRON: Ore ...	302	21,437	7,370	—
Bar ...	—	—	1,037	—
Steel, unwrought ...	739	—	11,849	—
LEAD: Pig and sheet ...	3,281	—	45,790	—
Pyrites of iron or copper ...	11,610	—	59,587	—
QUICKSILVER ... Lbs.	—	7,440	—	1,240
SILVER ORE ...	—	—	—	22,818
TIN, in blocks, &c. ... Cwts.	—	6,148	—	34,971
ZINC, crude ... Tons	—	156	4,752	—
OTHER ARTICLES ...	—	—	—	20,764
Total ...	—	—	262,174	92,460
Chemicals:				
ALKALI ... Cwts.	—	1,378	—	715
BRIMSTONE ...	2,040	—	5,465	—
SALTPETRE ...	7,535	—	4,237	—
Iron Manufactures:				
Beams, girders, &c. ... Tons	500	—	4,545	—
Unenumerated ... Cwts.	60,491	—	131,555	—
ZINC MANUFACTURES ...	6,510	—	6,878	—

## FOREIGN AND COLONIAL PRODUCE.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Sep. 30.	Month ended Sep. 30.	1895.	1896.
Copper:				
Ore: From Spain ...	1,350	50	5,400	106
"Italy ...	750	—	3,750	—
"United States ...	50	51	886	1,140
"Venezuela ...	—	—	—	14,471
"Chili ...	2,203	119	22,670	18,756
"Cape ...	1,946	7,789	2,979	15,698
"British N. America ...	352	809	2,943	7,156
"Other countries ...	—	—	—	—
Total ...	7,918	10,704	57,099	44,422
Regulus and Precipitate:				
From Portugal ...	—	45	—	1,575
"Spain ...	3,017	3,585	75,162	93,688
"United States ...	577	1,500	18,939	46,756
"Chili ...	230	—	2,625	5,750
"Other countries ...	499	316	32,812	4,473
Total ...	6,122	5,685	129,558	154,242
Unwrought and part Wrought:				
From United States ...	687	2,773	29,563	136,756
"Chili ...	988	1,004	46,414	47,468
"Australasia ...	801	688	30,434	33,443
"Other countries ...	300	781	14,388	37,997
Total ...	2,806	5,246	120,809	255,664
Iron and Steel:				
From Spain ...	350,010	357,390	811,495	213,047
Iron ore: Other countries ...	91,282	62,465	67,341	63,159
Total ...	441,292	419,855	888,836	296,206



## REVIEW.

*The Cyanide Process of Gold Extraction.* By James Park. (Champtaloup and Cooper, Auckland, New Zealand.)

The literature of the most recent process of gold extraction is growing at such a rate that it rapidly threatens to assume unwieldy dimensions. In addition to a mass of information in technical periodicals and the journals of scientific societies, a considerable number of text-books specially devoted to the subject have already appeared, and there is but little scope left for novelty or originality in a subject that has been worn threadbare, from the literary point of view, with surprising rapidity. The little book now before us, which pretends to be nothing more than a text-book for students and beginners, has, however, the advantage, shared by a comparatively small number of its fellows, of being written by a man who has a certain amount of real practical acquaintance with his subject, albeit on a small scale only. The author has the management of the small experimental plant, erected at the Thames by the New Zealand Government, for the purpose of investigating the suitability of the cyanide process to the various gold ores of New Zealand. In this capacity he has had to test a large number of gold ores, and these probably would be the more complex ores, and these more difficult to treat successfully, rather than simple ores presenting no problems of special difficulty. The author's experience is confined, of course, to New Zealand ores and New Zealand practice, and he has had to draw upon the writings of others to enable him to describe the process as practised in other countries. He has, however, shown a wise discrimination in selecting the authors he quotes from, and is evidently enough of a practical man himself to be able to appreciate the writings of practical men; hence it comes that he has drawn his information chiefly from the work of such men as Mr. Butters and Dr. Scheidel.

He has gone pretty thoroughly into the chemistry of the subject, and whilst avoiding a great deal of the more intricate portion of the theory, he seems to be sound and correct in his views as far as he goes; we think, indeed, that he has done wisely in not laying before students a number of the still somewhat hypothetical speculations in which some chemists have indulged. We do not, however, see why he should refuse to admit the action of atmospheric oxygen into the list of causes he gives of the loss of cyanide, more especially as he includes atmospheric carbon dioxide, which, according to him, decomposes the cyanide, liberating prussic acid; as he goes on to say that "the prussic acid thus liberated would be neutralised by any caustic-alkali present," it is obvious that the alkaline cyanide would be at once regenerated, and no cyanide would be lost. We need not point out to chemists that his mistake lies in imagining that a solution containing caustic alkali could at the same time contain free carbon dioxide. Mistakes of this kind are, however, rare, and the book is, upon the whole, a satisfactory one. It is clearly and simply written, and is illustrated by several very clear plans of cyanide plants, both for direct and for tailings treatment. It is, by the way, extraordinary that they have not yet found out in New Zealand that the stamp mill is the wrong machine for dry crushing. While it is still unapproached by any other machine as a wet crusher, and seems likely to hold the field in this capacity for some time to come, it was never intended for a dry crusher, and was only applied to that purpose, in the first instance, as a matter of temporary expediency. There are plenty of good dry crushers in the market, and it seems a pity that they do not awake to this fact in New Zealand.

This is not, however, a point for which Mr. Park can be held responsible, though we think he might have drawn attention to it. Nevertheless, he has described actual plants, and has covered the field fairly well, and has thus done good work. The most puzzling sentence to us in the whole book is one in the preface, where the author says:—"The manager of a cyanide plant need not be a trained analytical chemist. . . . Some experience in the working and management of milling machinery will always prove of great service."

If neither chemistry nor mechanics is essential to the manager of such a purely chemico-mechanical process, as the cyanide process undoubtedly is, we should like to know what they do consider an essential qualification for such a post in New Zealand.

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## TIN TICKETING.

THE fortnightly ticketing for tin ores was held at Tabb's Hotel, Redruth, on Tuesday. Results:—

VALUES OF ORES SOLD BY EACH MINE.		Tons cwt.		Per ton.		Value.	
Mines				£ s. d.		£ s. d.	
Dolcoath No. 1	14 0	35	7	6	495	5	0
do No. 1a	14 0	34	17	6	488	5	0
do No. 1b	12 0	34	15	0	417	0	0
Wheal Grenville a	20 0	36	17	6	737	10	0
do b	13 0	36	7	6	473	17	6
do No. 2	4 0	22	17	6	91	10	0
Basset Mines (L.L.) No. 1	11 0	37	5	0	409	15	0
do No. 1a	11 0	36	17	6	405	12	6
Carn Brea and Tincroft 1	9 0	32	17	6	297	17	6
Mines (Limited) 1a	9 0	33	0	0	297	0	0
do No. 2	1 0	25	10	0	25	10	0
West Kitty	15 0	37	5	0	558	15	0
East Pool a	6 0	24	15	0	148	10	0
do b	6 0	24	10	0	147	0	0
do No 2	1 0	9	0	0	9	0	0
Killifreth	12 0	35	0	0	420	0	0
Phoenix United No. 1	9 0	35	10	0	319	10	0
do No. 2	1 0	27	12	6	27	12	6
Wheal Kitty	9 0	37	7	6	336	7	6
	177 0				£6102	17	6

AVERAGE PRICE PER TON, £34 9s. 7d.

Total purchases:—Carvedras, 37 1-6h tons, £1331 15s. 5t.; Chyandour, 51 3/4 tons, £1787 17s. 11d.; Williams, 20 3/4 tons, £737 9s. 7d.; Redruth, 31 1/2 tons, £1120 17s. 11d.; Cornish, 23 3/4 tons, £829 11s. 8d.; Penpol, 12 tons, £295 10s. Total, 177 tons, £6102 17s. 6d.

AVERAGE PRICES PER TON.

August 11	£36 4 9	September 22	£36 11 6
August 25	35 18 2	October 6	34 9 7
September 8	36 1 6		

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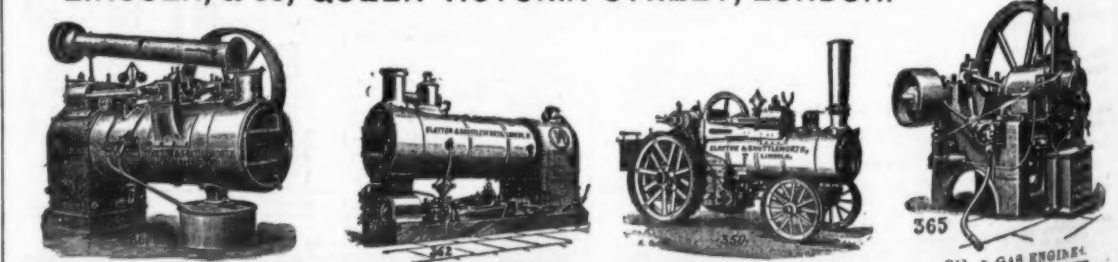
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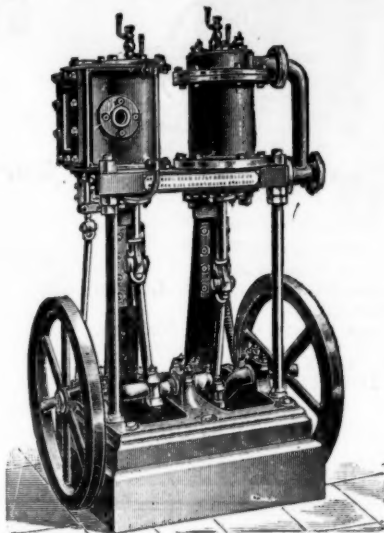
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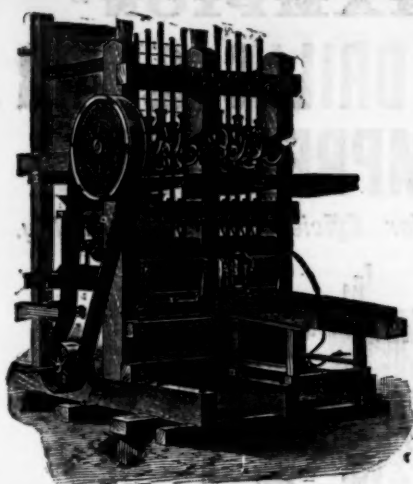
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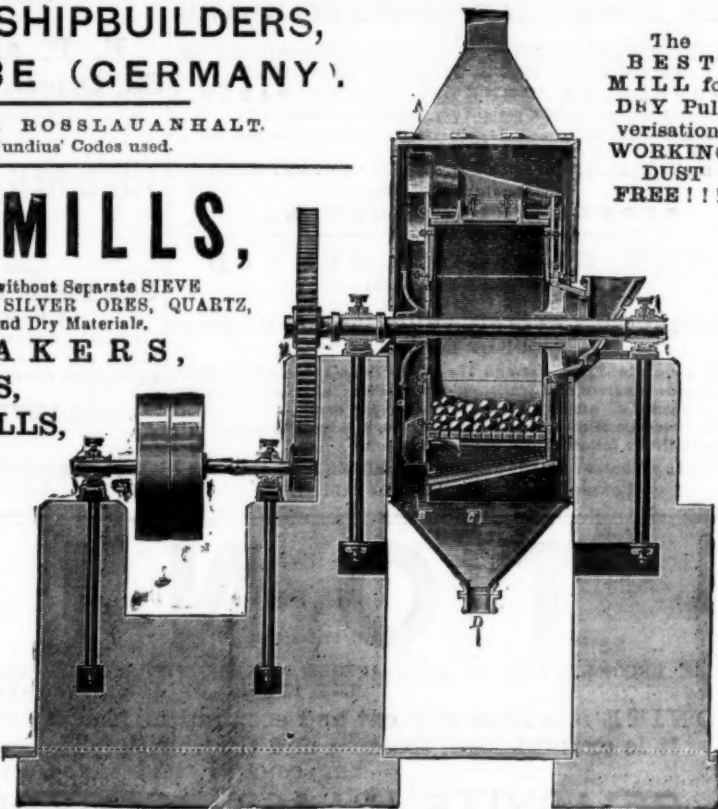
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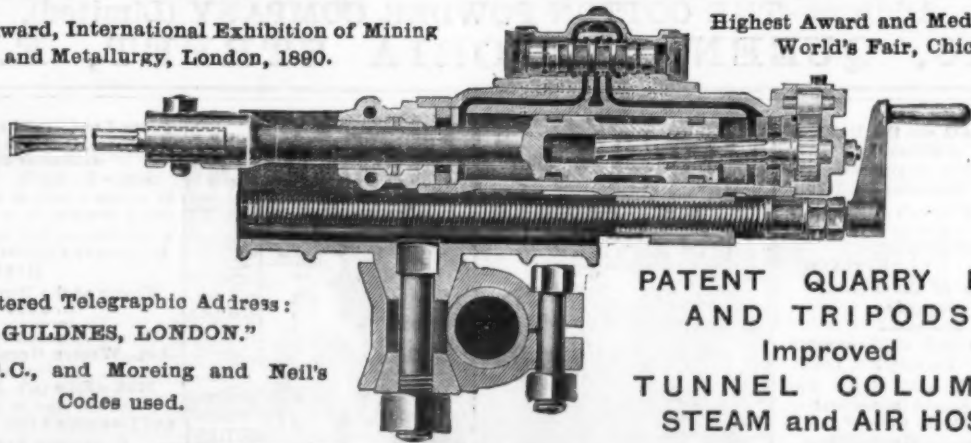
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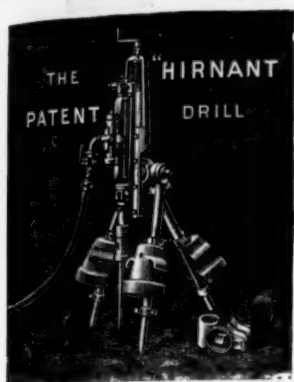


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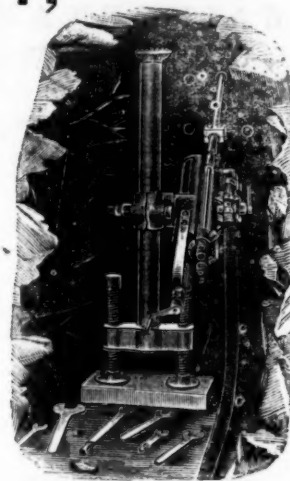
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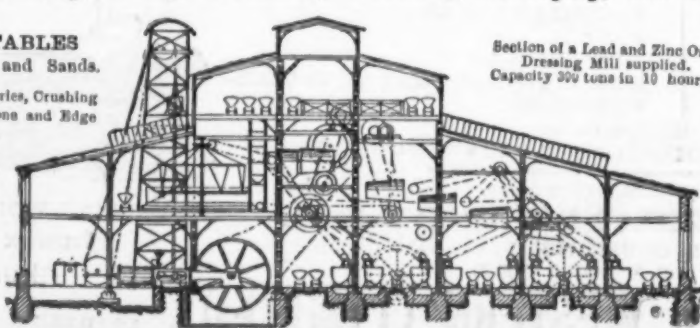
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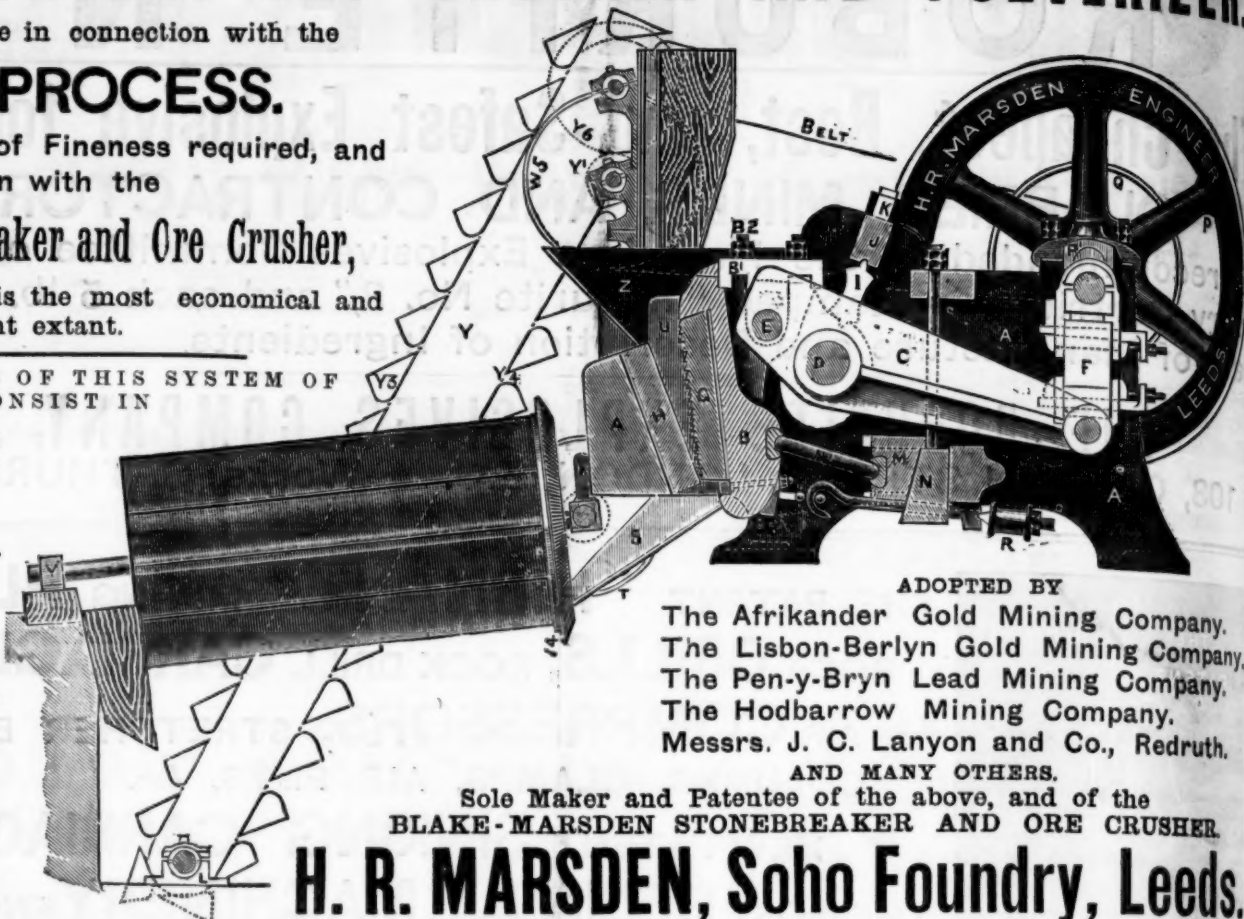
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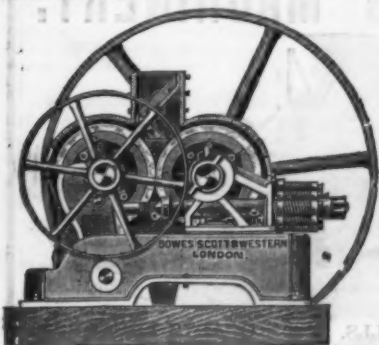
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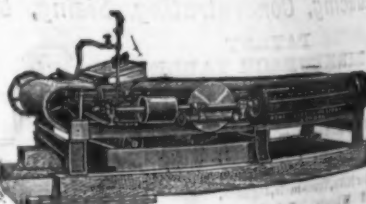
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